

PANZER GENERAL II

READ ME FIRST!

We know you're anxious to begin PANZER GENERAL II, but before you do, please be sure that your system meets the following minimum system requirements:

- Pentium 90 MHz IBM PC or compatible
- 16 MB of RAM
- Windows® 95 - **NOTE:** This is a Windows 95 game and should not be played on Windows® NT systems. Multitasking is not recommended when playing PANZER GENERAL II
- An **Uncompressed** hard drive with at least 25 **MB** free
- A 4X CD-ROM drive or faster
- A SVGA video adapter with 1MB of memory and a Color SVGA Monitor
- A 100% Microsoft (or Logitech) compatible mouse
- Microsoft mouse driver version 9.00 or higher or Logitech mouse driver version 6.24 or higher

In addition to the basic system requirements, the game requires that DirectX5 be installed to your hard drive. The option to install DirectX5 appears during the game installation. At the end of installation, you will be prompted to register PANZER GENERAL II electronically, to receive a free scenario.

INSTALLING THE GAME

You must install PANZER GENERAL II game files to your hard drive and have the PANZER GENERAL II CD in your CD-ROM drive to play this game.

To install the game, insert the CD into the CD-ROM drive. When the pop-up window appears, click on the **Install** option. If you have disabled the Windows 95 **Autorun**, or if it does not function, **Explore** the CD and double click on the **Setup** icon.

If you experience problems during installation, please refer to the "Troubleshooting" section of this data card. Additional information regarding sound and video setup can be found there.

STARTING THE GAME

Insert the PANZER GENERAL II CD into your CD-ROM drive, and select **Play** from the pop-up window. For users that have disabled the Windows 95 **Autorun** feature, or if it does not function, open the **PG2** program folder from your Windows 95 **Start** button and click on the **PG2** icon.

For complete and specific "how to play" information, please refer to the User Manual. Any notes regarding changes made to the game made after the User Manual was printed, and any rules errata can be found after the "Troubleshooting" section. Some changes were made too late to include in this data card. Please read the **README.TXT** file in your game directory for more information.

NOTICE

Several changes were made to the game after the User Manual was printed. Refer to the README.TXT file for complete listings of up to date information.

UNINSTALLING THE GAME

To uninstall the game, choose **Settings** from the Windows 95 **Start** button and select **Control Panel**. In the Control Panel, select **Add/Remove Programs**, left-click on **PG2**, and click on the **Add/Remove** button. The game and all of its components are then removed from your hard drive, except for your saved games or edited scenarios.

SAVING GAMES

PANZER GENERAL II requires space on your hard drive for saved games and temporary files. Each saved game can take up to 1 MB of hard drive space.

ELECTRONIC REGISTRATION

If you did not register your copy of PANZER GENERAL II after installation and wish to do so later:

1. From your desktop select the **Start** button, click on **Programs**, click on **PG2** and click on **Register for Free Stuff**.
2. Follow all on screen prompts.

Note: If you register electronically, or via the registration card, you will be provided with a code to unlock the scenario Caging The Bear, a hypothetical scenario in which the Americans and the British, along with the remnants of the German Army, attempt to push the Soviets out of Eastern Germany.

TROUBLESHOOTING

This section provides you with several easy steps to solve some common problems.

SOUND AND VIDEO CARDS

Some sound and video cards are not supported by Windows 95 and DirectX. If you do not have the following sound or video cards, the game may not work.

DirectX Supported Sound Cards: Aztech, Creative Labs, ESS, Media Vision, Microsoft

DirectX Supported Video Cards: ATI, Chips @ Technologies, Cirrus Logic, Matrox, S3, Tseng Labs, Western Digital, 3DLabs, ATI, Creative Labs, Rendition

DirectX 5 Setup

This game requires DirectX 5. If you do not have DirectX 5, then it can be installed from the CD. **Explore** the game CD and open the **REDIST** folder. Double click on **Setup** to start the DirectX 5 install.

DirectX DISCLAIMER

PANZER GENERAL II utilizes Microsoft's DirectX sound and video drivers. DirectX is a programming tool created by Microsoft, and the installation of DirectX may cause video problems and system anomalies with computers using video drivers that aren't DirectX compliant. DirectX is a Microsoft product, and as such, SSI cannot be responsible for changes that might occur to your computer system due to its installation. For DirectX related problems that cannot be fixed by updating to your video card's latest Windows 95 driver set, you must contact either Microsoft or the manufacturer of your video card for further technical support or service.

Microsoft retains all intellectual property rights to DirectX. The user has been granted a limited license to use DirectX with Microsoft operating system products.

Verifying DirectX Video / Sound Card Drivers

To verify that your sound and video drivers are DirectX 5 certified, follow the steps below.

1. Click on the windows **Start** button (usually found in the lower left corner of your screen).
2. Click on **Run**.
3. In the open field, type the command: **C:\progra~1\directx\setup\dxsetup.exe** then click on **OK**.
4. Make sure all drivers say "Certified" next to them.

If any of your drivers are not DirectX certified, you should contact the hardware manufacturer and see if they have certified DirectX 5 drivers.

Reinstalling Windows 95 Video Drivers

If you find that there is a problem with your display after you have installed DirectX 5, you can reinstate your old video drivers by following the instructions below:

1. Click on the windows **Start** button (usually found in the lower left corner of your screen).
2. Click on **Run**.
3. In the open field type the command: **C:\progra~1\directx\setup\dxsetup.exe** then click on **OK**.
4. Click on the **Restore Display Drivers** button.

This may require that you have the disk containing your original drivers.

PANZER GENERAL II WEB SITE

In addition to the SSI web page, there is a web site exclusively for PANZER GENERAL II which provides background information for the game. You can reach the web site at <http://www.panzergeneral.com>.

CAMPAIGN PLAY TIPS

As you progress through a Campaign, you will receive Prestige for winning battles and capturing Supply Points, Cities and Airfields. Prestige is used to Requisition units, take Replacements, Upgrade units, and make Experienced units stronger. Understanding how and when you use prestige is a key ingredient to a successful career as a Panzer General.

Key Concepts

Core Units

When you begin a campaign, pay particular attention to units with black numbers inside their strength tags. These are your Core units. Core units accompany you to all your battles, gaining experience as you progress through a campaign. When a battle ends, all your core units are brought up to full strength automatically, at no prestige cost to you.

Core Army Size

Your army makeup is limited by the amount of prestige awarded you as you progress through a campaign. When you win a battle, you are awarded prestige points. You may use those prestige points any way you wish between battles, but if you use most of your prestige to buy new units, you won't have much left to upgrade or overstrength your core units.

Prestige Use

When you are fighting a battle, you can use prestige to take replacements or to requisition (buy) new core units. Between battles you are sent to the field headquarters where, in addition to requisitioning new units, you can use prestige to upgrade units, overstrength units, and reassign units. (Note again that the only time you can upgrade, overstrength, or reassign units is between battles).

Prestige Decision Points

continued on next panel

When you are fighting a battle, you accrue prestige by capturing objectives. This prestige can be used to take replacements and requisition new units. If you wish to maximize your prestige award for winning a battle, limit the amount of prestige you use requisitioning new units during the battle. PANZER GENERAL II allows you the choice of requisitioning new units to turn the tide of a tough battle, at the cost of having less prestige available between battles. Note that taking replacements during a battle to bring your units up to strength does not count against the prestige award given for winning a battle.

MULTIPLAYER GAMES

PANZER GENERAL II can be played with up to four players over a network or via the internet. Detailed instructions for creating or joining a multiplayer game are given below. The game creator is given the exclusive ability to set some game options. He or she can change the difficulty level of each player side by clicking on the up and down arrows. This increases or decreases the amount of prestige points available to the player during the game. Also, the game creator can set a time limit (in minutes) for each turn by clicking on the clock icon and then clicking on the up and down arrows.

Network Play

Creating a Network Game

1. Make sure your PANZER GENERAL II CD is in your CD ROM drive.
2. Make sure you have a network connection established.
3. Start the PANZER GENERAL II game.
4. Click on the **Multiplayer** button from the Start screen.
5. Click on the **Network** selection in the Multiplayer screen.
6. Click on **Create**.
7. Enter a name for the game.
8. Enter your player name.
9. Choose the number of players (2-4).
10. Select a scenario and start the game when all players have logged in.

Joining a Network Game

1. Make sure your PANZER GENERAL II CD is in your CD ROM drive.
2. Make sure you have a network connection established.
3. Start the PANZER GENERAL II game.
4. Click on the **Multiplayer** button from the Start screen.
5. Click on the **Network** selection in the Multiplayer screen.
6. Click on **Join**.
7. Enter your player name.
8. Click on a game name to join.
9. Your game will start when the creator determines that all players are ready.

Internet Play

Many Internet Service Provider's (ISP's) use dynamically assigned IP addresses. This means that a user's IP address changes each time they log onto their ISP. If your ISP uses dynamically assigned IP addresses, you need two telephone lines to play PANZER GENERAL II over the Internet (one to log into your ISP, the other to call your opponent and tell him or her what your IP address is). Your other option is to play PANZER GENERAL II on Club SSI.

Creating an Internet Game

1. Make sure your PANZER GENERAL II CD is in your CD ROM drive.
2. Log onto the Internet using your Internet Service Provider (ISP).
3. Determine your IP address by double-clicking on the WINIPCFG.EXE file (located in your C:\WINDOWS directory). Note the IP address numbers and the location of the decimal points. Inform your players of your IP address, if they do not already have it.
4. Start the PANZER GENERAL II game.
5. Click on the **Multiplayer** button from the Start screen.

6. Click on the **Internet** selection in the Multiplayer screen.
7. Click on **Create**.
8. Enter a name for the game.
9. Enter your player name.
10. Choose the number of players (2-4).
11. Select a scenario and start the game when all players have logged in.

Joining an Internet Game

1. Make sure your PANZER GENERAL II CD is in your CD ROM drive.
2. Log onto the Internet using your Internet Service Provider (ISP).
3. Start the PANZER GENERAL II game.
4. Click on the **Multiplayer** button from the Start screen.
5. Click on the **Internet** selection in the Multiplayer screen.
6. Click on **Join**.
7. Enter your player name.
8. Enter the **IP address** of the game **host**.
9. Click on a game name to join.

CLUB SSI™

Welcome to a New World of Conflict

Club SSI™ is a FREE, easy to use, online gaming service provided by SSI and Headland Digital Media™ which allows you to find PANZER GENERAL II players on the Internet. Using the Club SSI interface, you can easily chat and create multiplayer games with opponents from around the world. To check it out, visit: **www.clubssi.com**



To use Club SSI the first time:

1. Make sure your PANZER GENERAL II CD is in your CD ROM drive.
2. Log onto the Internet using your Internet Service Provider (ISP).
3. Open your web browser (eg. Netscape Navigator™, Microsoft Internet Explorer™).
4. Go to <http://www.clubssi.com/panzer/reg.htm> and follow the instructions to register an account.
5. Club SSI will send you an email with your username and password.
6. Start the PANZER GENERAL II game.
7. Click on the **Multiplayer** button from the Start screen.
8. Click on the **Club SSI** internet play selection in the Multiplayer screen.
9. Enter your username and password.
10. Use the Club SSI screen to find your opponent(s).

If you have already received your username and password:

1. Make sure your PANZER GENERAL II CD is in your CD ROM drive.
2. Log onto the Internet using your Internet Service Provider (ISP).
3. Start the PANZER GENERAL II game.
4. Click on the **Multiplayer** button from the Start screen.
5. Click on the **Club SSI** internet play selection in the Multiplayer screen.
6. Enter your username and password.
7. Use the Club SSI screen to find your opponent(s).

SPECIAL THANKS

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INTRODUCTION

Do you have what it takes to win?

Will you fight as a Wehrmacht Officer, or perhaps lead your comrades in the Soviet Army? You may want to hit the beaches at Salerno and Normandy as an American or British General. No matter what path you choose, you will need all your skills to triumph. The successful "Panzer General" devises sound strategic plans and carries them out with unswerving commitment. Generals who are indecisive inevitably fail. Can you forge a battle-winning command and conquer your foes? Isn't it time to find out?

Getting Started

If you want to get a quick start, refer to the "Tutorial" section of the manual, which begins on page 3. It provides a step-by-step battle plan to familiarize you with the screens and basic features of a PANZER GENERAL® II scenario, and should help you win part of the first battle of the Blitzkrieg campaign. If, however, you prefer to familiarize yourself with the game as a whole, turn to the "Basic Screens, Menus, and Buttons" and "Game Concepts" sections on pages 14 and 40, respectively.

What Comes with this Game?

Your box should contain this user manual, a datacard, and a PANZER GENERAL II CD. This user manual explains how to play and contains important information on menus, scenarios, and unit classes and equipment. To get the game running on your computer, follow the installation instructions on the datacard.

Copy Protection

In order to play PANZER GENERAL II, the game CD must be in the CD-ROM drive.

Using the Mouse

In PANZER GENERAL II, whenever the mouse passes over a button or hex, smart text, describing the area under the cursor, appears in information bars at the top and bottom of the screen, or beside the unit or button in question. This makes identifying buttons and units easy during game play. In this book, the term "click" means moving the mouse pointer to the desired area on the screen and pressing the left mouse button.

"Right-click" means moving the mouse pointer to the desired area and pressing the right mouse button.

► New to PANZER GENERAL II

For those who played the original PANZER GENERAL, the sections or paragraphs headed by a right-pointing triangle highlight changes and new features in PANZER GENERAL II. This symbol is only used for changes and features that may not be immediately obvious, unlike Multiplayer Play and the Scenario Builder.



TUTORIAL

This tutorial is intended to explain basic menus and button functions, and to guide you through a small introductory battle. For detailed information about the menus and options in PANZER GENERAL II, see the "Basic Screens, Menus, and Buttons" section starting on page 14; for explanations of various aspects of play, see the "Game Concepts" section starting on page 40; and for detailed strategy notes and game play hints, see the **README.TXT** file located in your **PANZER2** directory.

Starting the Tutorial



From the PANZER GENERAL II Start screen, click on the Play a Scenario button, the left-most button in the row. This brings up the Scenario Selection screen. On the left side of the screen are two windows; the upper window should be blank, and the lower contains an alphabetical listing of the scenarios. Click repeatedly on the down arrow button, or click on the scroll bar slider, and hold down your mouse button as you drag the slider down. Near the end of the list you should see the Tutorial scenario listed. Click on Tutorial, and a description of the scenario appears in the upper window, along with the number of players the scenario was designed for, and the number of turns it lasts.



On the right side of the screen, flags indicating the Axis and the Spanish Republican forces have appeared next to the Player Control buttons. Right now the Axis is selected for the human player, indicated by the depressed gold-tone button. The Spanish Republican forces are controlled by the AI, since the computer icon is depressed and highlighted in gold. You can switch the settings if you like, but return them to the default before beginning the scenario.

Next to the flags are windows giving the prestige percentages for each side. Prestige is a measure of how you are viewed as a commander by your superiors; the more prestige you have, the more resources are at your disposal. Essentially, in PANZER GENERAL II it functions as money; prestige points allow you to buy additional units and equipment, as well as restore damaged units. Arrow buttons on the top and bottom of each Prestige Adjustment window allow you to adjust the percentage up and down. If you lower your opponent's prestige setting to 50%, the Spanish Republican army receives half of the discretionary funds they would ordinarily receive. You do not need such an advantage in this scenario, so leave the percentages at the default.

When you are finished exploring the Scenario Selection screen, be sure that the Tutorial scenario has been selected, and that the Prestige Adjustment and Player Control settings are back where they started, then click on the **check mark** button at the bottom right of the Scenario Selection screen to start the Tutorial. If you change your mind, click on the Exit button, right above the **check mark** button, to return to the PANZER GENERAL II Start screen.

Playing the Tutorial

TURN 1

When you start a scenario, the Main Game screen appears, with the Turn panel overlaying the lower half of the screen. The following information is displayed:

♦ Axis Turn 1

Friday, December 23, 1938

Weather: Cloudy

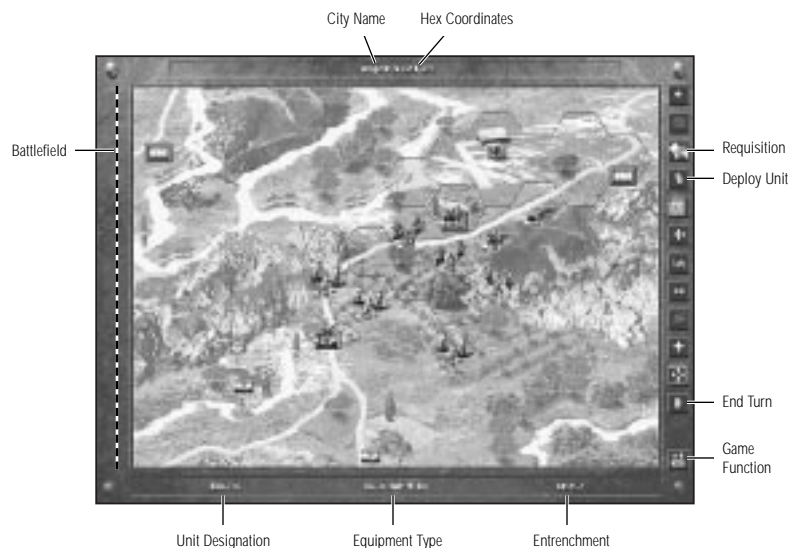
Brilliant Victory: 2 Turns Remaining

Victory: 3 Turns Remaining

Tactical Victory: 4 Turns Remaining

In order to obtain a victory, all objectives must be held by your forces, which means that you have moved your forces into every hex that is a victory objective. In this scenario, your victory objective is the city of Almadrones at hex (18,5). If you capture Almadrones before the end of Axis turn two, you achieve a brilliant victory. So long as you capture the city by the end of your fourth turn, you still achieve at least a tactical victory. Brilliant victories provide more prestige than regular victories or tactical victories, which is especially important in campaign play.

Click on the **check mark** button to remove the Turn panel.



The Main Game screen is dominated by the Battlefield, the map of the contested area. At the top and bottom of the screen are text bars which provide information during play, and at the right is the Options menu, a vertical row of buttons which control various functions in the game. When you move your cursor over a button, smart text appears describing the button's function. For detailed information about the Options menu, see the "Option Buttons" section on page 21.

Currently the Battlefield is centered on your selected unit, an infantry unit in hex (20,3). As you pass the cursor over the screen, smart text appears at the top of the screen displaying terrain types and hex coordinates. If you pass the cursor over a unit, its designating number appears at the lower left of the screen, the unit's equipment type appears in the center of the bar, and the unit's entrenchment value is given at the lower right. Move your cursor over to your unit, the 4th Motorized Infantry Regiment of the 6th Panzer Division, designated **4/6**. Its equipment type, Regular, is given, and it is entrenched at level zero.

Right-click on this unit, and the View Unit panel appears. This displays quick statistics for a unit, such as its attack range, its soft and hard attack values, and its current ammunition and fuel levels. Various unit functions, such as mounting and supply, are also controlled from this panel. For detailed information, see the "View Unit Panel" section starting on page 27. Left-click on the Exit button on the lower right side to remove the View Unit panel.

Move the cursor over your victory objective, the city of Almadrones in hex (18,5). It is defended by the Divisional Artillery of the 12th Loyalist Division, a 75mm artillery unit with an entrenchment level of eight. Entrenchment gives a defending unit bonuses in combat, making it unwise to attack a unit that is deeply entrenched. Being attacked reduces a unit's entrenchment, therefore the prudent tactic is to attack with artillery from a distance before moving in with your other troops. Also protecting Almadrones are three Loyalist infantry units, which need to be eliminated or driven off before you can assault the city directly.

Softening up the defense.

The first step is to drive a gap in the Spanish defenses. Move the cursor over to your unit **116/6** in hex (21,2), the 10.5 leFH 18 artillery unit, and left-click to select that unit. Now pass the cursor across the screen until it rests over an enemy unit. If that enemy unit is within the currently selected unit's attack range, an attack reticule appears. On this reticule are given the expected reductions in strength points for both sides; your projected casualties are listed below the German flag, and your enemy's losses are listed under the Spanish Republican flag. The numbers displayed are not guaranteed, but are an estimation of the



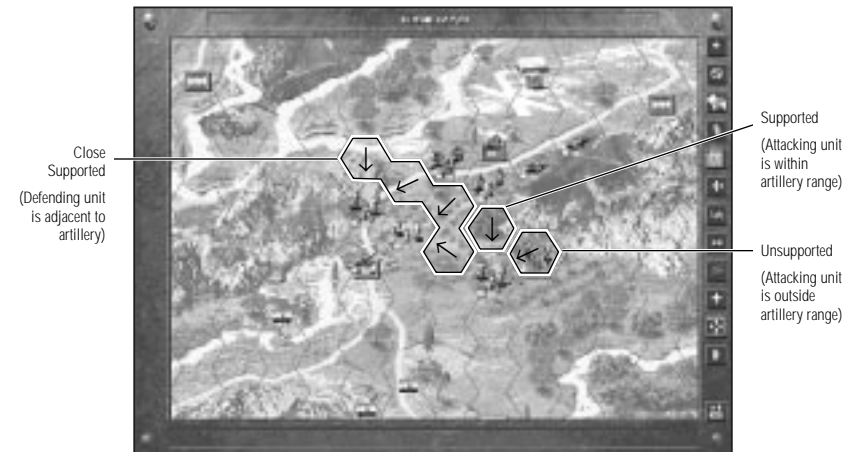
strength losses that may be incurred in an attack. Left-clicking on an enemy unit with the attack reticule over it initiates an attack. Normally, if that enemy unit's range is sufficient, it may return fire simultaneously. In this case it cannot, because no unit is ever entitled to return fire upon attacking artillery units.

In this case, the enemy infantry unit **2/12** in hex (19,4) is the best choice, since eliminating it opens up the widest avenue of attack upon the objective city of Almadrones. Left-click on this unit. Gunfire sounds, explosions occur, and hopefully, the enemy takes damage. Now left-click on your unit **117/6** in hex (22,3), a 75mm artillery unit, and again attack enemy unit **2/12**.

Evaluating enemy artillery support.

To widen the area of attack, it is important to knock back or eliminate either enemy unit **1/12** or **3/12**. Both the **1st** in hex (18,4), and the **3/12** in hex (21,5) can receive artillery support from the 12th Artillery in Almadrones. This means that any non-artillery unit which attacks these units comes under fire from the 12th Artillery before it can engage in an attack. Artillery units provide support when your unit is attacked by an enemy unit within the range of the artillery unit. If you right-click on the 12th Artillery, the View Unit panel appears. On the top left side of the panel, the display shows that the 12th Artillery has a range of three. Click on the Exit button to remove the View Unit Panel.

Looking at the map, you should see that both positions from which you can attack the **1/12** are within range of the artillery in Almadrones, as is an attack on the **3/12** from hex (21,4). However, if you attack the **3/12** from hex (22,5), to the upper right of the enemy unit, you are out of the 12th Artillery's range. This is the best choice for your next move.



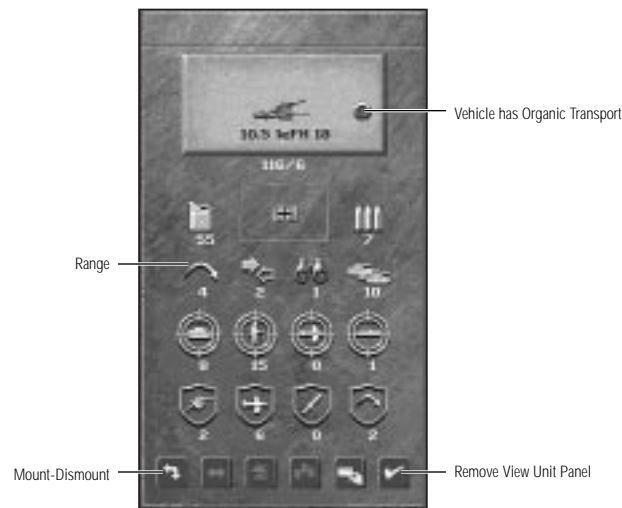
Select unit **114/6** in hex (22,4). When a unit is selected and has not yet moved, an area of hexes darkens around that unit's hex. The unit is able to move into any of these hexes by left-clicking on the destination hex. In this case, move the cursor down to hex (22,5) and left-click. This places your unit above and to the right of the enemy. Now that the **114/6** has moved, it can attack the enemy infantry. Move the attack reticule over **3/12** and left-click.

Sometimes an attack goes very well, and you force the unit to retreat; other times, the enemy can put up a rugged defense, doing a considerable amount of damage to the attacker while sustaining little strength loss itself. If enemy unit **3/12** retreated, you need to take advantage of the opening and move unit **57//6** to hex (20,4). However, time is on your side, and it is better to wait, and try to tempt the enemy infantry into attacking; allow your pioneers to entrench instead of attacking. If enemy **3/12** did not retreat, move unit **57//6** to hex (21,4). The next turn, you may choose to attack with one or both of these infantry units if the enemy has not already retreated.

Move the rest of your units closer to the front, such as unit **4/6** to hex (19,3) and unit **11/6** to (20,4) or (20,5). Again, it is more prudent to refrain from attack, and allow your units to entrench. Left-click again on a unit to deselect it.

Moving your artillery.

Although artillery units **116/6** and **117/6** have already fired, they can still be reselected as they have not yet moved. Reselect unit **116/6**. When you place the cursor over any of the darkened hexes surrounding the unit, it turns into a truck icon. This means that the artillery must be mounted to move. If you left-click on any of the darkened hexes, the unit turns into a truck, and moves to the hex you left-clicked on. Alternately, bring up the View Unit panel by right-clicking on the unit. Move the cursor over the Mount - Dismount button and left-click on it. Your artillery is now mounted and can be moved to hex (20,3).



Note: Once a unit has moved, it cannot be dismounted until your next turn, and mounted artillery units cannot give support fire for their allies!

Mount up unit **117/6** as well, and move it to hex (21,3). Left-click to deselect.

Notice that the Next Unit button at the top of the Options bar is no longer highlighted. This signifies that all your units have moved. Now is a good time to requisition new units before continuing on to the next turn.

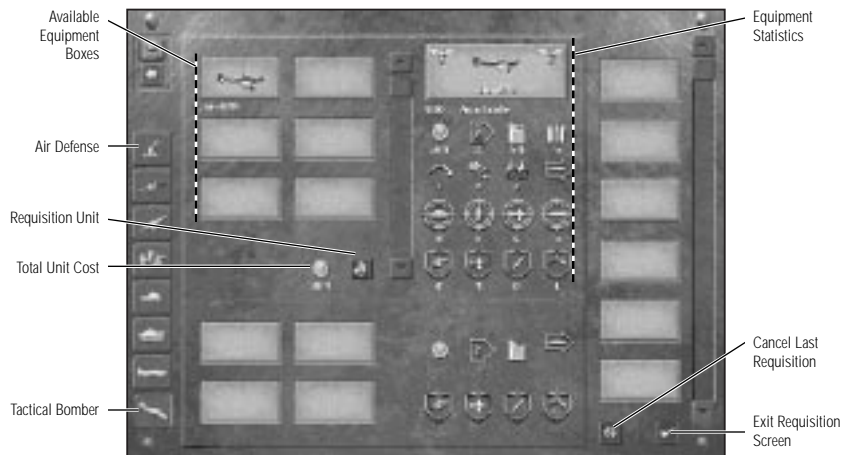
Calling for reinforcements.



Left-click on the Requisition button, the third from the top of the Options bar. This brings you to the Requisition screen.



On the left side of the screen are the Unit Class Selection buttons. An arrow button at the top left of the screen allows you to toggle between different Axis countries' forces. Left-click on the Select Air Defense button at the top of the screen. Several icons appear in the Available Equipment boxes to the right of the Class Selection buttons. Click on one of them and two things occur: that unit's statistics appear in the Equipment Statistics area of the screen, and icons appear in the Available Transport boxes underneath the Available Equipment boxes. When purchasing units that cannot move on their own, Trucks are assigned to them by default. To change to a different type of organic transport, click on your choice; the cost of the transport is added to the total cost of the unit. However, since there are no aircraft threatening your forces at this time, air defense guns are unnecessary. It is a good idea, though, since your enemy does not have an air force, or massive air defense armaments, to launch an aerial attack of your own.




Move the cursor down to the Select Tactical Bomber button at the bottom of the screen and left-click on it. In the center of the screen, an icon of the JU87B bomber unit appears in one of the Available Equipment boxes. Left-click on the JU87B to bring up the bomber's statistics. The prestige cost of the unit is given below the Available Equipment boxes, and your available prestige is given at the top of the Equipment Statistics area. The JU87B bomber is going to cost you 432 of your 500 prestige points, easily affordable. Click on the Requisition button next to the Total Cost of Unit indicator at the bottom of the Available Equipment area. A bomber icon appears in the Units Available for Deployment boxes on the right side of the Requisitions screen. You have just added a new bomber to your attack force. Left-click on the Exit button at the bottom right on the screen. If you have made a mistake, click on the Cancel button to the left of the Exit button and begin again.


When you click on the Exit button, the game returns to the Main Game screen with the Deployment panel extended. Use the cursor to scroll the screen to the right on the map by holding the cursor along the right edge of the screen. Since the bomber unit is the only unit available for deployment, the icon box is depressed and darkened hexes have appeared around the airfield at hex (21,1). Left-click on any of these darkened hexes to place the JU87B unit in that hex. Then click on the Exit Deployment button at the bottom right of the screen.

Attacking from above.

Continue your assault around Almadrones with your new bomber unit. When you select that unit, available movement hexes include hexes already occupied by ground units. Air units can occupy the same hex as a ground unit, unlike other ground units. Move your bomber to hex (19,4) over the enemy artillery unit 12. The targeting reticule appears when you move your cursor over hex (19,4). Left-click to attack.

 After your attack is finished, click on the Air Mode button in the Options bar to view the damaged enemy below.

The Allies retaliate.

 Left-click on the End Turn button. Now the Allied Turn 1 panel appears. Click on the **check mark** button to continue play. The Spanish Republican forces should counterattack on their turn, peppering one of your infantry with artillery fire, then possibly attacking with their own infantry. Keep a close eye on the amount of damage your units take.

TURN 2

When the computer player has finished its turn, the turn panel appears again, displaying the following information:

♦ *Axis Turn 2*

Saturday, December 24, 1936

Weather: Cloudy

Brilliant Victory: 1 Turn Remaining

Victory: 2 Turns Remaining

Tactical Victory: 3 Turns Remaining

Click on the **check mark** button to continue.

Returning your units to full strength.

The infantry unit 4/6 at hex (19,3) most likely has sustained losses, and may now be in hex (19,2) after retreating. Select unit 4/6 and right-click on it. Inside the View Unit panel on the lower right is the Replacements button. Left-clicking on this button adds strength points back to your unit; if no enemy is adjacent, your unit returns to full strength. Receiving replacements does cost you prestige points. If another unit has sustained more damage than 4/6, call for replacements for that unit instead, so long as it is not adjacent to an enemy unit. If you attempt to get replacements for a unit adjacent to the enemy, fewer strength points are added to your unit, reflecting the difficulty of getting men and supplies so close to the front lines.

Digging in for the assault.

Dismount your artillery units with the Mount - Dismount button in the View Unit panel, and use them next to destroy enemy opposition around the city. Move your infantry and tanks on to the city, finishing off any other defenders in your path. Once you secure your positions around the city, you do not have to advance your artillery up as you did last turn – Almadrones is within their striking range. Don't forget to shell Almadrones again with your bomber unit. When all of your units have moved or attacked, click on the End Turn button.



During the enemy's second turn, the Allies' remaining units may be in retreat, may attempt to get replacements, or may entrench for a final defense. Some units may try to counterattack, but they are unlikely to do much damage. It's time for the kill.

TURN 3

When the enemy has finished its second turn, use the same strategy of attacking with air and artillery units to soften up your remaining targets, this time in the city itself, and finish off weakened enemy units with your ground forces. As soon as one of your tank or infantry units occupies the city, the scenario is over, and the victory panel appears. You are given a chance to review the battlefield. Click on the **check mark** button to return to the PANZER GENERAL II Start screen.

If you have followed the tutorial instructions, you should have received a normal victory. You can replay the scenario, with a more aggressive approach, to achieve a brilliant victory, taking the city of Almadrones in just two turns.

THE BASIC SCREENS, MENUS, AND BUTTONS

This section provides step-by-step suggestions to familiarize you quickly and easily with the basic screens, menus, and buttons in PANZER GENERAL II.



The Start Screen

When you first begin PANZER GENERAL II, the Start screen appears. At the bottom right of the screen are nine game option buttons. As you run the mouse cursor over a button, smart text appears above it, describing what that button does.

Play a Scenario



Brings up the Scenario Selection screen, from which you can select and start a single player scenario. For more information, see the "Scenario Selection Screen" section, beginning on page 16.

Play a Campaign



Brings up the Campaign Selection screen, from which you can select and start a single player campaign. For more information, see the "Campaign Selection Screen" section, beginning on page 18.

Start a Multiplayer Scenario



Brings up the Multiplayer Game Selection screen, from which you can create or join a multiplayer game, either over a Local Area Network (LAN), or via the Internet. For more information about starting and playing multiplayer games, see the "Playing a Multiplayer Game" section, starting on page 36.

Play By E-mail



Brings up a dialog box, from which you can choose either to start a new play by e-mail game, or load a turn from a previously saved play by e-mail game. For more information on playing by e-mail, see the “Play By E-Mail” section starting on page 39.

Start the Scenario Builder



Brings up the Scenario Parameters screen, from which you can begin constructing your own scenario. See the “Scenario Builder” section starting on page 78 for more information on creating scenarios.

Best Careers



Brings up the Best Careers screen, in which the performance of the best generals is ranked. Clicking on a name brings up the Dossier screen. See the “Dossier Screen” section beginning on page 34 for more information.

Load a Saved Game



Brings up the Game Functions dialog box, from which you can load a saved game. See the section “Game Functions Panel” on page 26 for more information on resuming a previously saved campaign or scenario.

Show the Introduction



This brings up the opening cinematic for PANZER GENERAL II. You can exit the cinematic at any time, and return to the Start screen, by pressing any key, or clicking a mouse button.

Show the Credits



Runs the credits for the research and development team responsible for bringing you PANZER GENERAL II. Click on the screen or press any key to exit the credits and return to the Start screen.

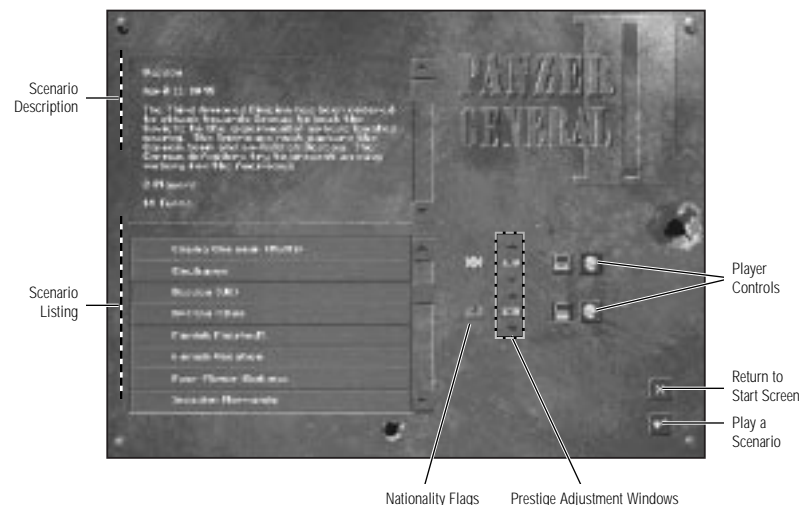
Exit the Game



Clicking on this button exits the game and returns you to your Windows® 95 desktop.

The Scenario Selection Screen

There are over thirty scenarios in PANZER GENERAL II, depicting historical and theoretical battles from throughout World War II.



The Scenario Selection screen is divided into several parts. On the left side of the screen are two windows; the upper window is the scenario description area, the lower window contains an alphabetical listing of the currently available scenarios. At the right in the center are the Player Control buttons and the Prestige Adjustment windows, and at the lower right are the Exit and Start A Scenario buttons.

To select a scenario, click on the down arrow button and keep it depressed, or click on the scroll bar slider, and hold down your mouse button as you drag the slider down. When you see the name of the scenario you wish to play, click on it, and a description of the scenario appears in the upper window, along with the number of players the scenario was designed for, and the number of turns it lasts.

Note: All scenarios are not always available. When you start a single player game, only two player scenarios, with the computer controlling one side, are displayed in the scenario listing. In multiplayer games, the selection depends on the number of players, and only scenarios designed for that number of players are shown.

Also, nationality flags, indicating the primary Axis and Allied forces involved in the conflict, appear next to the Prestige Adjustment Windows when a scenario is selected. In a single player game, you can switch which side you wish to play by clicking on the head and computer icons. The current controller of an army is indicated by a depressed gold-tone button. In a multiplayer game, clicking on the flag causes it to switch to a new nationality for that player.

Another way of altering the challenge of a given scenario is by changing the prestige allotment. Next to the nationality flags are the Prestige Adjustment windows, giving a percentage for each side. Prestige is a measure of how you are viewed as a commander by your superiors; the more prestige you have, the more resources are at your disposal. Essentially, in PANZER GENERAL II, it functions as money; prestige points allow you to buy additional units and equipment, and to resupply, upgrade, and reinforce your existing units. During a scenario, prestige is often awarded during certain turns, or for capturing Victory hexes. Arrow buttons on the top and bottom of each Prestige Adjustment window allow you to adjust the percentage up and down. If you lower your opponent's prestige setting to 50%, the enemy army receives half of the discretionary funds they would ordinarily receive. If you raise it to 150%, the enemy receives half again over what they are normally allotted. This is a powerful tool for adjusting the odds in a scenario; a weak force can suddenly acquire more powerful reinforcements; conversely, a powerful army can find itself short on men and equipment late in a drawn out battle.



When playing a multiplayer game, the Time Per Turn button appears, on the right side of the screen. Click on it to set a time limit on each player's turn. Simply click on the arrows that appear to increase or decrease the time by five minutes. Turns can last between five and thirty minutes. If a time limit is set however, play automatically continues to the next player at the end of the allotted period.

When you have selected your scenario, chosen your side, and adjusted the prestige percentages if desired, then click on the Play A Scenario button, the **check mark** button at the bottom right of the Scenario Selection screen to start the game. If you change your mind about playing a scenario, click on the Exit button, right above the **check mark** button, to return to the PANZER GENERAL II Start screen.

The Campaign Selection Screen

There are five campaigns in PANZER GENERAL II: Blitzkrieg, Defending the Reich, Crusade in the West as either the United States or Great Britain, and Onward to Berlin. Each campaign is made up of several scenarios based on historic and conjectural battles from World War II.



When the Campaign Selection screen appears, the five campaigns are listed on the left hand side. Click on a campaign title and a brief description is given. For detailed design notes on the campaigns, which include the historical outcomes of these battles, see the "Campaign Design Notes" section starting on page 57.

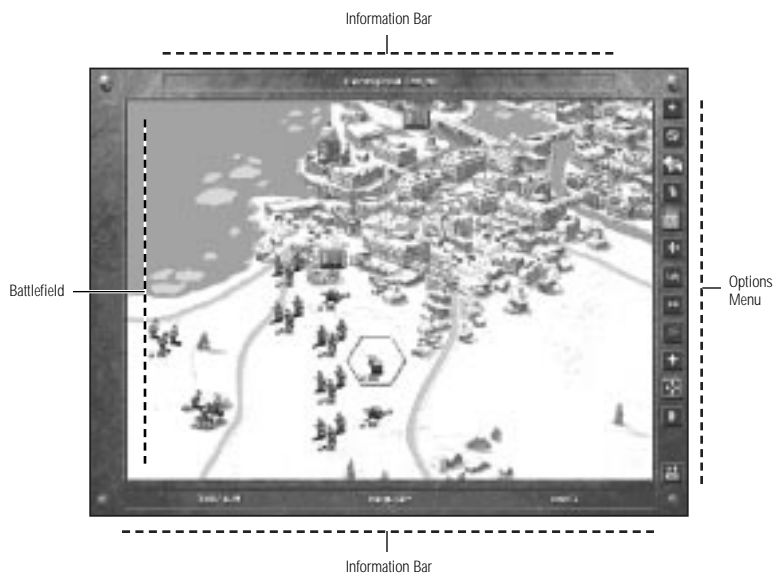
Some campaigns are more difficult than others. For a greater or lesser challenge, you can adjust the AI's prestige allotment. The Prestige Adjustment window is located on the right hand side of the screen, and is bracketed top and bottom by arrows. Click on these arrows to adjust the percentage. Reducing the computer's percentage reduces the prestige points available to the AI, making the game easier for you, while increasing the AI's prestige percentage gives the computer greater resources, making the campaigns more difficult. When you are satisfied with the campaign you have selected, and the AI's prestige percentage, click on the Play A Campaign button, the **check mark** button at the bottom right of the screen, to begin the first battle in the campaign. If you decide not to play a campaign, click on the Exit button to return to the PANZER GENERAL II Start screen.

Cinematics

Throughout the game, various cinematics may be played to introduce scenarios, celebrate victories, and mourn losses. You can exit any cinematic by pressing any key, or clicking a mouse button.

The Main Game Screen

The Main Game screen is where the action of PANZER GENERAL II takes place. There are several parts to this screen: the Information bars are at the top and bottom of the screen, the Battlefield is in the center, and the Options menu buttons are on the right side of the screen.



The Information Bars

At the top and bottom of the Main Game screen are Information bars. When you pass your mouse cursor over a hex, the top bar displays hex coordinates, and either a description of the terrain in that hex, the name of a city, or the type of structure that occupies that hex. If the hex contains a unit, that unit's numerical designation appears at the bottom left side of the screen, the equipment type is stated in the center, and the unit's entrenchment level is given on the far right.



The Battlefield

The Battlefield is the area where all movement and combat take place. In two-player games, one player controls all of the Axis forces, and the other controls all of the Allied forces. In multiplayer scenarios, players can control different Axis and Allied countries, some working together, others against each other. The campaign games are designed for a single player.

The map scale is approximately two kilometers per hex, and the unit size varies, depending on strength, from divisions and regiments down to battalions and individual companies. There can be only one unit per hex, except that an air unit can occupy the same hex as a ground or naval unit. Naval units must keep at least one hex between each other at all times, representing the huge size and turning radius of these flotillas. The following features appear on the map:

- ◆ Twelve different types of terrain.
- ◆ Nationality flags indicating city, port, and airfield ownership.
- ◆ Victory Objective hexes denoted by a nationality flag with a gold hex border.
- ◆ Supply points denoted by a nationality flag with a green hex border.
- ◆ Victory Objectives that also act as Supply points denoted by a nationality flag with a border half gold and half green.
- ◆ Unit icons with strength tags indicating current strength, movement status, and leader status.

To view different parts of the Battlefield, move your mouse cursor to the edge of the screen in the direction you wish to scroll the map.

Option Buttons

The right-hand side of the Main Game screen is a vertical row of buttons offer game options. Options that are unavailable appear darkened. If you pass the mouse cursor over a button, smart text appears to the left of the button, describing its function.

Next Unit



Selects the next unit that has not moved. If all units have already moved, the icon becomes shaded. **Note:** *Units that have not fired can still be manually selected to receive orders.*

Cancel Move



This button is available when you have selected a destination hex for the unit's move. When a unit has moved (but before it has attacked), it can return to its point of departure without any adverse effects (like fuel consumption). Cancel Move does not permit you to take back attacks, nor does it allow you to undo moves if the unit has sighted previously hidden enemy units. If the unit did not attack before moving, canceling the move permits you to take any action with the unit: attack, movement, resupply, and so on.

Requisition



Brings up the Requisition screen, from which you can requisition units with prestige points. Requisitioned units are deployed in or adjacent to supply points (if land units) or friendly airfields (if air units). You cannot requisition ships, fortifications, or strongholds. See the "Requisition Screen" section of this manual on page 29 for more information.

Deploy Forces



Brings up a side panel from which you can deploy units that you have requisitioned during play. You may also deploy your core units at the start of each campaign battle and some scenarios. To place a unit on the Battlefield click on it, then click on a shaded Battlefield hex. Click on the Exit Deployment button in the lower right corner to remove the Deployment panel. For more information on deployment, see the "Deployment Panel" section on page 23.

Field Headquarters



Brings up the Field Headquarters screen, from which you can view all the units currently under your command, requisition additional units, and evaluate your own performance. For detailed information, see the "Field Headquarters Screen" section, starting on page 31.

Air Mode



Toggles Air Mode on and off. When both a surface and an air unit occupy the same hex, the surface unit is automatically selected. When Air Mode is on, the air unit is selected when the hex is clicked on.

Strategic Map



The Strategic Map shows the entire Battlefield on a small scale. The Strategic Map replaces the Battlefield map, with your victory objectives, supply points, and visible units all appearing in miniature. The Options menu remains to the right of the Strategic Map, allowing you to toggle the Air Mode on and off to view air units, and to access other game options. To view a portion of the map up close, click on the section of the map you wish to see. The Strategic Map disappears, and the Battlefield map replaces it, now centered on the point you selected. You can also exit the Strategic Map at any time by clicking on the Strategic Map button again.

Replay Turn



Rewinds to the beginning of the previous turn, or to an e-mail turn from an opponent. You can review an opponent's e-mail move this way.

Chat



In multiplayer games, this brings up the Chat panel. See the "Playing a Multiplayer Game" section on page 36 for more information.

Additional Options



Provides access to other game controls. See the "Additional Options Menu" section on page 25 for further information.

Full Screen



Removes the Information bars and Options menu from the screen to provide a larger view of the Battlefield. Click on the Full Screen button again, now located in the lower right corner of the screen, to return the Main Game screen to its original state.

End Turn



Ends your turn and proceeds to your opponent's turn.

Game Functions



Brings up the Game Functions panel, from which you can save your game, load a previously saved game, start a new game, or quit the game you are currently playing. Note that you cannot save during a multiplayer game. For more information, see the "Game Functions Panel" section, beginning on page 26.



Pop-Up Panels

These menus or panels are primarily accessed from the Main Game screen, although some, such as the Game Functions panel, can be reached from several different screens.

Deployment Panel

Clicking on the Deploy Forces button brings up the Deployment panel. You may also see the Deployment panel at the start of a campaign game, when you are allowed to deploy your core units, and at the beginning of certain scenarios in which you also have the option of placing some of your units in their starting positions. You primarily use this panel to deploy units that you requisition during play.

If, however, you are given the chance to deploy your troops at the beginning of a battle, it is best to start by viewing the Strategic map, in order to see the entirety of the contested terrain and evaluate its tactical possibilities.

► **Note:** *If you do not deploy all your forces during your first turn, thereafter you are only allowed to deploy units from their normal deployment zones. Ground units can only be deployed on or adjacent to supply points, and air units are only able to be placed on airfield hexes. In certain battles there are deliberately fewer deployment hexes than needed to reflect certain historic situations.*



The Deployment panel is very simple. There is a vertical panel where your units appear, controlled by a scrollbar to their right, and several buttons in the lower right corner of the panel. If you have more than eight units available for deployment, click and hold on the scrollbar slider, and drag the slider down, or click on the up or down arrow of the scroll bar and hold down the mouse button. To place a unit on the Battlefield, click on it and available deployment hexes should darken. You may need to scroll the Battlefield, or transfer to the Strategic map to see these deployment hexes. Ground units can only deploy on or adjacent to supply points you control, while air units can only deploy on airfields or aircraft carriers that you control. In campaign play, special deployment “jump off” hexes are available on your first turn only; otherwise, the same rules apply. Click on a shaded Battlefield hex to deploy the unit.

Click on the Requisitions button to purchase additional units for deployment. See the “Requisitions Screen” section on page 29 for more information.

Use Air Mode to show only air units.

Note: *One air unit and one land unit can occupy the same hex.*

The Strategic Map button replaces the Battlefield map with the Strategic map. Click on an area of the Strategic map to return to the Battlefield map, centered on the area you selected.

The Show Hexsides button lays a grid on the Battlefield map, which may prove useful in making distance judgments during deployment.

Click on the Exit Deployment button in the lower right corner to remove the Deployment panel.

Additional Options Menu

When you press the Additional Options button, located on the Options menu bar, a panel slides out to the left of the Options menu, giving access to other game controls.

Status Report



Brings up the Turn panel at the bottom of the Battlefield, on which you can view the turn number, date, weather conditions, and victory objectives. Click on the **check mark** button to remove the Turn panel.

Hot Keys



Brings up a window listing the hot keys for PANZER GENERAL II. Click on the **check mark** button to remove the Hot Keys panel.

Audio Settings



Brings up another menu, which slides over the Additional Options menu, from which you can adjust your audio settings.



Clicking this button toggles the music on and off; a depressed gold-tone button indicates the music is on, while a raised button indicates it is off. If the music is on, use the slider bar underneath the Music button to adjust its volume.



Clicking this button toggles the sound effects on and off; a depressed gold-tone button indicates sound effects are on, while raised indicates that they are off. If the sound effects are on, use the slider bar underneath the Sound Effects button to adjust their volume.

Click on the **check mark** button at the bottom of the menu to save the changes and return to the Additional Options menu.

VCR



Brings up the VCR menu, from which you can review previous turns of any saved battle. Four buttons, Play, Stop, Fast Forward and Rewind, control the function. Play plays the current turn. Stop stops the replay of a turn. Fast Forward advances to the next turn. Rewind returns to the previous turn.

Show Terrain



Removes hexes, ownership flags, and units from the Battlefield map to reveal the terrain. Click on Show Terrain again to exit this mode.

Show Hexsides



This overlays a hex grid on the Battlefield map. Click on Show Hexsides again to exit this mode.

Game Functions Panel



The Game Functions panel has four main options: New Game, Load Game, Save Game, and Quit Game. Click on an option and then click on the **check mark** button to select that option. Not all of these options are available from every screen, for example, you cannot save a game from the Start screen. Options that are unavailable are grayed out. If you change your mind about using any of these options, click on the Exit button on the lower right to return to the previous screen.

New Game

Selecting New Game returns you to the PANZER GENERAL II Start screen, from which you can choose to start a new game.

Load Game

Selecting Load Game brings up a second panel, on which are listed the file names for your previously saved games. If no names are listed, then no games which PANZER GENERAL II recognizes as saved games are located in the **PANZER2** directory.

Click on a saved game file to bring up a description of that saved game. If this is the game you wish to load, click on the **check mark** button at the bottom of the Load Game panel, and click on the **check mark** again to confirm your choice. If you decide not to load a game, click on the Exit button on the lower right to return to your original game screen.

Save Game

Selecting Save Game brings up a second panel, on which are listed the file names for your previously saved games. Click on a slot that says New Saved Game and type in a file name. Then click in the text box at the bottom of the Save Game panel, and enter a description of the saved game, for later reference.

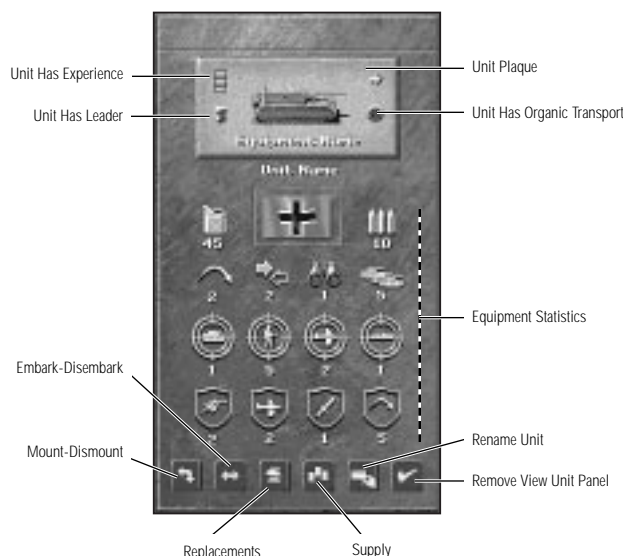
Note: You cannot save a multiplayer game. Click on the Done button to save the game. The appropriate extension is added to your filename. Your games are saved into the **PANZER2** directory. If you decide not to save a game, click on the Exit button on the lower right to return to the previous screen.

Quit Game

If you choose Quit Game, you are asked to confirm your decision. Click on the **check mark** to quit your game and return to the PANZER GENERAL II Start screen. If you decide to continue your current game, click on the Cancel button to return to your originating screen.

View Unit Panel

The View Unit panel appears when you right-click on a unit during play.



At the top of the panel, a box states the unit's experience level and equipment type, and displays an icon of the unit. Below that is the unit's nationality flag, centered in the first of four rows of icons. The icons give the unit's current fuel and ammunition supplies, its strength rating, and its attack statistics. If a unit is mounted, the transport's statistics are shown. Pass the mouse cursor over a statistic icon, and smart text appears, labeling that statistic. For detailed explanations of the statistics, see the "Unit Statistics Descriptions" section, starting on page 83. At the bottom of the View Unit panel are five buttons, which control various unit functions, and the Exit button on the far right.

Mount - Dismount



When using organic transport, units can move more quickly but are more vulnerable to attacks. After you mount or dismount, and move your unit, you may elect to cancel that move. The move you just made cannot be taken back unless selected immediately after the unit's movement. A mounted unit uses its transport's statistics if it is engaged in battle while mounted.

Embark - Disembark



Embarking and disembarking units onto or from air or naval units can only be done at the beginning of a unit's turn, in other words, a unit may not move or fight before embarking or disembarking. Disembarking ends the unit's turn; a unit may not move or attack after disembarking. Embarking and disembarking are not equivalent to mounting and dismounting. For the differences between Air and Sea Embarkation, refer to the "Embarking and Disembarking Air and Naval Units" sections on page 47.

Replacements



Replaces lost strength points and automatically resupplies the unit as described in the "Supply Rules" section, starting on page 52. This action ends the unit's turn. Ground units can get replacements anywhere; air units can receive replacements only when in a friendly airfield or carrier hex. Naval units cannot take replacements; ship repairs take far longer than the duration of a battle. A unit receives fewer replacements if an enemy unit is adjacent. If more than two enemy units are adjacent, the unit cannot receive any replacements. Bad weather and desert terrain also reduce replacements.

Click on the Exit button to remove the View Unit panel.

Supply



Supplies the selected unit with up to half its maximum capacity; this is the only action that the unit can take during its turn. Units receiving replacements automatically resupply. Adjacent enemy units prevent resupply except as part of receiving replacements. Weather and terrain can also affect resupply, but a unit is always guaranteed to receive a minimum resupply of one ammo point and one fuel point, regardless of conditions. For more details, see the "Supply Rules" section, starting on page 52.

Rename



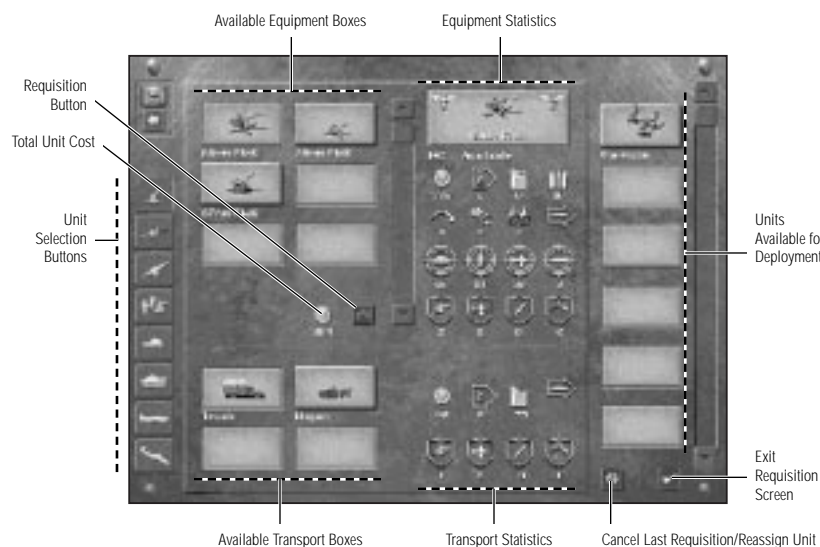
Click here to rename your unit. A text box appears; simply click inside and type to rename the unit.

Secondary Screens

The Requisition, Field Headquarters, and Dossier screens are all accessed from several points in the game. Exiting from them in most cases returns you to the screen or panel from which you accessed them.

Requisition Screen

The Requisition screen is broken into several parts. An arrow button at the top left of the screen allows you to toggle between different countries' forces. Beneath that is the vertical row of Unit Class Selection buttons. Clicking on a Unit Class Selection button makes icons appear in the Available Equipment boxes to the right of the Class Selection buttons. These icons represent the various types of equipment in that class that are currently available. Click on one of the Available Equipment boxes; that unit's statistics appear in the Equipment Statistics area of the screen. Passing the mouse cursor over the statistic icons causes smart text to appear, labeling the icon, but for a detailed explanation of these statistics, see the "Unit Statistics Descriptions" section, starting on page 83. Your Available prestige is given above the Equipment Statistics area.



If the selected unit is able to use transport to move, icons also appear in the Available Transport boxes below the Available Equipment boxes. When purchasing units that cannot move on their own, the Truck transport is already depressed. If you wish to choose another type of transport, click on another Available Transport box to select that transport type for the unit, and the cost of the transport is added to the Total Cost of Unit indicator at the bottom of the Available Equipment area. Next to that indicator is the Requisition button; click on it to add the unit to your forces. The unit's icon appears in one of the Units Available for Deployment boxes on the right side of the Requisitions screen.

If you change your mind, click on the Cancel button to cancel your last requisition. Repeatedly clicking on Cancel continues to cancel your requisitions in reverse order. You can also click on a unit in the Units Available for Deployment area, and click on Cancel to cancel just that requisition. Click on the Exit button at the bottom right on the screen to return to your original screen. If you have made a requisition during a game, the Deployment panel appears. See the "Deployment Panel" section on page 23 for information on deploying your recently requisitioned units.

Requisition Considerations

The prestige cost of units only roughly correlates with their effectiveness, so examine combat values closely before purchasing or upgrading equipment. Remember that an expensive purchase or upgrade has to be balanced against the need for enough prestige to afford replacements for your core units during a tough battle.

Maximum fuel capacity and especially maximum ammo capacity need to be carefully examined. Supply is more of a constraint if the unit is intended to carry an attack to the enemy, than if it is requisitioned to provide stationary defense for a victory objective far behind the front lines. Keep in mind that a unit can easily use up several rounds of ammo in a turn if repeatedly attacked, or if providing defensive fire for nearby friendly units that are being attacked.

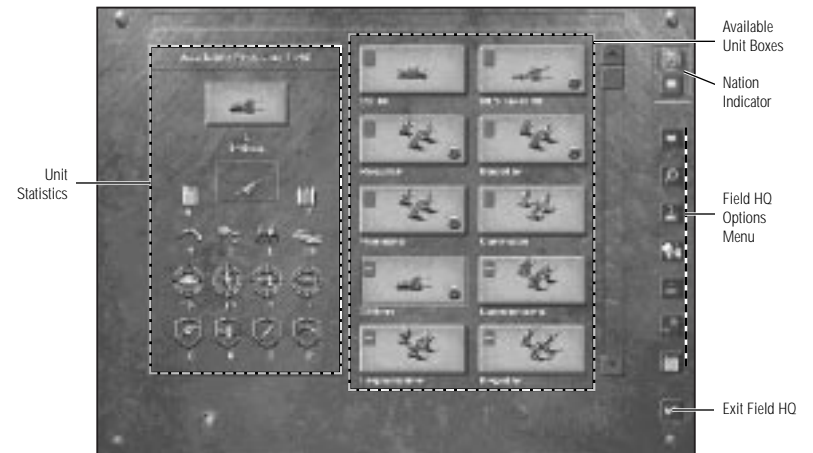
Close defense is another statistic that you can regret having overlooked if the unit runs into infantry in the difficult terrain common to most battlefields. A unit defends using its close defense versus infantry, rather than its ground defense value when the battle is in a forest or city, or when a rugged defense occurs.

An evaluation of the statistics of enemy units can be useful in planning which units to requisition. Start by comparing your attack values and defense values against each other to see who has more destructive potential in a fair fight. Then compare initiative values to see who is more likely to initiate combat first, bearing in mind that experienced units receive a bonus to their initiative.

Experience tends to be very important in aerial combat, where initiative values don't differ much and attack values are high relative to defense values. It is less important in early-war tank combat, where attack values tend to be lower compared with defense values.

Field Headquarters Screen

The Field Headquarters screen allows you to examine all of your forces in detail. On the left side of the screen is a Unit Statistics area, in the center are rows of Unit boxes, and on the right side of the screen are the Field Headquarters menu buttons. You can rotate through the forces of the countries under your control by clicking on the arrow button below the nationality flag at the upper right corner of the Field Headquarters screen. If you have more units of a particular army than can fit in the Unit boxes, use the scroll bar to move up and down through the roster. Clicking on a unit brings up that unit's statistics, and activates several of the menu buttons.



Dossier



Brings up the Dossier screen, from which you can review your performance as a general, either in the current scenario, or over the course of the campaign. For more information, see the "Dossier Screen" section, starting on page 34.

Inspect Unit



Brings up the Inspect Unit screen, from which you can evaluate a unit's performance in the scenario, or over the course of a campaign. For more information, see the "Inspect Unit Screen" section, starting on page 35.

Go To Unit



Only usable during a battle, this exits the Field Headquarters screen and centers the Battlefield on the selected unit.

Requisition



Brings up the Requisition screen, where you can purchase new units to add to your forces. For more information, see the "Requisition Screen" section, beginning on page 29.

► Overstrength Unit



During campaign play, a unit with an experience level of one or greater may be made overstrength using this button. You may only do this between battles, and each time it adds one to the strength of the unit, up to the unit's experience level. For example, a unit with ten base strength, and two experience levels, may have a maximum strength of twelve. Using overstrength costs prestige points, and each unit may only receive overstrength once after every battle.

If an overstrength unit is damaged during a battle, replacements only restore the unit to normal strength. However, after the battle, the unit can be made overstrength again, and restored to its previous level. If the unit has not reached its maximum, or achieves a new experience level, it may be made even stronger.

For example, a unit with three bars of experience has been raised to twelve strength. During the next battle they are reduced to nine strength, and take replacements, raising the unit to ten strength. After the battle, from the Field Headquarters screen, you click on Overstrength and the unit is raised to one strength point each time you click, to a maximum of thirteen.

Improving units to overstrength status is a slow process, but provides a combination of numbers and quality that can smash some enemy units with a single attack.

► Upgrade



Activates the Upgrade Unit screen and enables you to change the type of unit within its class and add or change organic transport if available. You can only upgrade units from the Field Headquarters screen between battles. Upgrading costs prestige points.

Reassign Unit



In campaign play, this command removes the unit from your forces, reassigning it to another general's command. This frees prestige points for use on a different unit, or new equipment for existing units. This command can only be used between battles.

Game



Brings up the Game Functions panel from which you can load, save, quit, or start a new game. For more information, see the "Game Functions Panel" section starting on page 26.

Exit



Exits the Field Headquarters screen, and returns you to the previous screen, or begins a new battle, if you are between battles in campaign play.



► Dossier Screen

The Dossier screen records your performance as a commander, either over the course of a scenario, or a campaign.



On the left are tallied the outcomes of your battles, during campaign play: Brilliant Victories, Victories, Tactical Victories, and Losses. In the center are the number of enemy units destroyed or forced to surrender because of your leadership, organized by unit class; and on the right are the number of casualties your own forces have suffered under your command.

At the top of the screen are listed the awards, if any, you have been given because of exceptional performance during campaign play, and a snapshot.

Below the snapshot of your general is a name. Click on the name to change it.

On the far lower right of the screen is the Exit button, which returns you to the previous screen.



Inspect Unit Screen

The Inspect Unit screen is reached from the Field Headquarters screen. It gives more detailed statistics on the unit than the View Unit panel, as well as listing the unit's performance in the current scenario or campaign.



At the top of the screen is the name and unit equipment type, above an icon of the unit. Click on the unit's name or the Rename Unit button to change it. The unit's statistics are given below that; run the mouse cursor over a statistic's icon, and smart text appears in an Information bar at the top, labeling the icon. See the "Unit Statistics

Descriptions" section on page 83 for details on the statistics. Below the unit's statistics are the unit's transport statistics, if the unit uses a transport.

► On the lower right side of the screen, in a box, the unit's battle record is given, tallying the number of enemy units this unit has destroyed or forced to surrender in each of the unit classes. Also at the right, above the battle record, if the unit receives a special leader, the leader's name and picture appear, along with two buttons. Click on the buttons to list the leader's special abilities in the Information bar at the top of the screen. For more information, see the "Leaders" section on page 45.

When you are finished reviewing the unit's statistics, click on the arrow button on the lower left to go on to the Next Unit, or click on the Exit button to return to the Field Headquarters screen.

PLAYING A MULTIPLAYER GAME

PANZER GENERAL II allows you to play multiplayer games through a LAN (Local Area Network) or over the Internet. For more detailed explanations of some Multiplayer functions, see the enclosed datacard.

Multiplayer Options Screen



Click on the Start A Multiplayer Scenario button, located on the PANZER GENERAL II Start screen, to bring up the Multiplayer Options screen. On this screen are three options from which you can select your method of play.

LAN

The LAN Connection options allows you to create or join a game through a Local Area Network.

Internet

The Internet Connection option lets you create or join a game through the internet.

Club SSI

Club SSI is a planned internet service that will allow you to meet other PANZER GENERAL II players, and join in multiplayer games with them. For more information, see the Strategic Simulations website, www.ssionline.com.

Creating a Multiplayer Game

To create a game, go from the Start screen to the Multiplayer Options screen by clicking on the Start A Multiplayer Scenario button. From the Multiplayer Options screen, choose the type of game you are creating by clicking on the appropriate option: LAN Connection or Internet Connection. You are asked if you want to create a game or join a game. Click on the Create Game option, then click on the **check mark** button. You are then asked to enter a name for the game you are creating. Enter a name of your choice and confirm it by clicking on the **check mark** button.

You are then asked to enter your name. Enter your name and confirm it by clicking on the **check mark** button. Next you are asked for the number of players. Click on the number of players, between two and four, that are in your game, and then click on the **check mark** button. **Note:** PANZER GENERAL II multiplayer scenarios were designed with specific numbers of players in mind. Therefore, the scenarios available on the Scenario Selection screen are dependent on the number of players in the game.

The Scenario Selection screen appears, listing the available scenarios in the lower left window. Click on the arrows to scroll through this list. Clicking on a scenario displays its information in the upper left window.

The lower right window shows the selected scenario's countries' flags, the players' country assignments, and prestige modifiers. Increase or decrease a player's prestige by clicking on the up or down arrows that are above and below the default setting. The game creator is able to change a player's country by clicking on the flag next to that player's name. The upper right window is a chat box. To send a message to another player, click on the text box and enter your message.

Click on the Time Per Turn button, on the right side of the screen, to set a time limit for each player's turn. Simply click on the arrows that appear to increase or decrease the time by five minutes. Turns can last between five and thirty minutes. If a time limit is set, play automatically continues to the next player at the end of the allotted period.

After you finish selecting a scenario and adjusting any player settings, click on the **check mark** button to begin play.

Joining a Multiplayer Game

To join a game already created by another person, go from the Start screen to the Multiplayer Options screen by clicking on the Start A Multiplayer Scenario button. You should now be in the Multiplayer Options screen. Choose the type of game you are joining by clicking on the appropriate option: LAN Connection or Internet Connection. You are asked if you want to create a game or join a game. Click on the Join Game option, then click on the **check mark** button. You are then asked to enter your name. Enter your name and confirm it by clicking on the **check mark** button.

If you are joining a LAN game, PANZER GENERAL II automatically scans your network for available games. However, if you are joining an Internet game, you are asked to enter the IP address of the session host. Type in the IP address and press **Enter**. If you want to search for available games, leave the text field blank and press **Enter**.

The next screen displays the available games. Click on the one you wish to join, and the Main Game screen should appear.

Multiplayer Game Options

Chat

In a multiplayer game, you have the option of chatting with other players in the game. The Chat panel pops up when you receive a message. To send a message to one or all of the other players during game play, click on the Chat button on the Main Game screen. The Chat panel appears.



The upper text box shows chat entered by you and received from others. Each player's text is written in a different color. Below the Messages Sent and Received box is a smaller text bar. Click inside this text bar and type to enter a message, and press **Enter** to send that message. Your message automatically goes to all players in the game.

If you wish to chat with only certain players, click on the Chat button, then select the recipients by clicking on their number, which appears next to the flag of their primary nation. Selected players numbers are depressed and gold tone; unselected players have raised, silver tone numbers. After you select players to chat with, enter your message in the text box at the bottom of the screen as normal. Unselected players are unable to see your message. Once again, if you do not select specific recipients before entering your message, all players receive your message. Click on the Exit button, on the left side of the screen, to remove the Chat panel.

Saving Games

You cannot save a multiplayer game.

Player Disconnection

If a player drops out or is disconnected during a multiplayer game, when it is that player's turn, play reverts to the next player on the same side, who controls both players' forces. If the player that drops out is the only player on that side, the game ends.

PLAY BY E-MAIL

PANZER GENERAL II supports two player e-mail games.

Starting a Play By E-Mail Game



To start a new game, click on the Play By E-Mail button located on the Start screen. You are asked if you want to start a new game or load a turn. Click on the Start a New Game option and then click on the **check mark** button.

The Scenario Selection screen appears, listing the available scenarios in the lower left window. Click on the arrows to scroll through this list. Clicking on a scenario displays its information in the upper left window.

The lower right window shows the selected scenario's countries' flags, the players' country assignments, and prestige modifiers. Increase or decrease a player's prestige by clicking on the up or down arrows that are above and below the default setting of 100. You are able to change a player's country by clicking on the flag next to that player's name. After you finish selecting a scenario and adjusting any player settings, click on the **check mark** button to begin play.

When you click the End Turn button during game play, the Files to Save screen appears. Click on a New Save Game slot, and type in a file name. Then, if you wish to, click in the lower window to type in a description of the saved game. Click on the **check mark** button to save the game. A message appears saying, "E-Mail Turn Successfully Saved." Click on the **check mark** button, and you are returned to the Start screen. E-mail games are saved into the **PANZER** directory. This save file can be attached to an e-mail message, and e-mailed to your opponent.

Loading a Turn

When you receive a turn via e-mail, be sure to save the attached file into the **PANZER** directory. After you start the game, to load a turn, click on the Play By E-Mail button located on the Start screen. You are asked if you want to start a new game or load a turn. Click on the Load a Turn option, then click on the **check mark** button. The Files to Load screen appears, listing the available e-mail games. Click on the file you wish to load; a description of the saved game appears in the lower window, if one was entered. Click on the **check mark** button to load the selected game.

The Main Game screen appears. The Replay Last Turn button is now active; click on it if you wish to replay the last turn.



GAME CONCEPTS

These terms and concepts are used throughout PANZER GENERAL II. Understanding them is not vital to play, but this information can be quite a useful aid to making sound decisions, and planning winning strategies.

Beginning a Battle

You begin a battle by selecting, from the PANZER GENERAL II Start screen, either a single player scenario or campaign game, a multiplayer scenario, or a play by e-mail scenario. In the campaign game, you control a group of core units throughout the various battles you fight. Auxiliary units, which have their strength numbers in white, are available for the duration of that battle only. Surviving core units gain experience through combat, and your unit combinations reflect your own preferences. As you progress through the campaign, the amount of prestige awarded to you increases, allowing you to build a more powerful army as your career continues.

In campaign play, you have the option of deploying your core units within specified deployment areas before the first turn of each scenario. There is generally no deployment phase for non-campaign games (like e-mail, multiplayer, or single player scenarios).



Combat

The attack reticule appears when you pass the mouse pointer over an enemy within the firing range of your selected unit. On this reticule are given the expected loss in strength points for both sides; your projected casualties are listed below your flag, and your enemies losses are listed under the flag of that unit's country. Keep in mind that these are estimated losses; although based on the relative attack and defense values, terrain, and experience modifiers, they may not be the same in actual battle! In any conflict there is a random factor. If you decide to attack, click when the attack reticule is over the enemy unit.

As battle ensues, unit losses are indicated on the unit strength plaques, and battle details are listed in the Information bars. A unit may move and attack, or attack then move, with the exception of artillery, air defense, or anti-tank units which cannot attack after moving.

Core and Auxiliary Units

In campaign play, your forces for a battle may contain both core and auxiliary units. Core units are the heart of your army, units which you deploy for every battle, and go with you to each new scenario. Remember, core units which you do not deploy on your first turn can thereafter only be deployed in or adjacent to supply points. Core units have black numbers on their strength tags. However, you may also receive auxiliaries, units which are given to you for the duration of a particular conflict, to aid you in your mission. You know you have



received reinforcements when units that you did not requisition appear on the Battlefield under your control. Auxiliaries have white numbers on their strength tags, and do not continue to the next battle with the rest of your army.

Entrenchment

Entrenchment represents the fact that ground units, given enough time, can create defensive structures that better prepare them to withstand attack. Entrenching takes time unless a unit begins a scenario entrenched. All ground units can entrench, but some can take better advantage of ground and therefore entrench more quickly. Entrenchment levels are a feature of units, not terrain, but affect combat much as terrain does — they make a devastating "Rugged Defense" more likely.

Units that have not moved are assumed to dig in each turn even if they attack, resupply, and so on. Each turn the unit does not move, it entrenches further. If a unit moves out of the hex, it loses all its entrenchment levels, so you should pick a good position before having your troops dig in. Moving units have a zero entrenchment level, but gain the base entrenchment level of the particular terrain they end in when they stop.

All terrain types have a base entrenchment level from zero to three, which ground units in that hex with lower entrenchment levels automatically obtain at the end of their turn. This number is not added to the unit's entrenchment level; it replaces it. Base entrenchment levels are: three for cities, two for forests, bocage (intertwined hedgerows), and mountains, one for rough terrain and hills, and zero for everything else. Units can entrench up to a maximum of five levels above the base entrenchment level for the terrain.

Entrenchment levels are reduced by attacks or bombardment of entrenched ground units. Each attack, whether it is successful or not, reduces the unit's entrenchment level by one level. Repeated attacks in a single turn can even reduce the entrenchment level below the base level for the terrain, thus facilitating further attacks during the same turn. A proven way to attack a strongly entrenched unit is with a combination of aerial and artillery preparatory bombardment, followed by ground attacks by one or more units. Engineer units, with the exception of bridge engineers, ignore entrenchment, making them valuable units during this type of assault.

Experience

Each time a unit takes part in combat it gains experience, and the more successful it is in combat, the more experience points it gains. An experience level is symbolized by a bar in the upper left corner of the unit's icon box in the View Unit panel. The maximum experience level a unit can achieve is five. When two units fight, their relative experience levels affect combat, and help determine relative casualties. Experience also determines overstrength size, reduces the risk of rugged defense, and modifies initiative. Units with two or three experience levels should be considered veteran troops and those with four or five levels elite troops.

Veteran units sustain fewer casualties and inflict more casualties than a less experienced unit. Units gain experience by fighting and gain the most by destroying, or forcing into retreat, more experienced enemy units and units with better equipment.

Making veteran and elite units overstrength is valuable because they are better able to withstand and inflict casualties in combat. During campaign play, you can make a unit overstrength between battles from the Field Headquarters screen.

Game Turns

In PANZER GENERAL II, each battle lasts up to a specified number of "turns." In each turn you, your allies, and your opponents are given a chance to move units, attack enemy units, resupply units, and so on. When your turn is done and you have moved or given orders to all of your units, click on the End Turn button in the Options menu on the Main Game screen.

► During a turn, most units can move once and attack once, in either order. However, there are several exceptions to this rule: artillery and air defense units can only shoot before they move, recon units have the **phased movement** ability, which allows them to move several times in a turn, and tanks in clear terrain may **overrun** weaker opponents, allowing them to move and attack more than once in a turn. Also, leaders have special abilities which may allow the unit they are commanding to move or attack more than once in a turn.

► Units which have moved, but may still attack, are indicated by a silver bullet to the left of the strength tag of their Battlefield icon. If a unit either moves or attacks, and you select another unit, you can return to the first unit so long as it has further actions that can be taken.

Example: You move Tank Unit A to a hex adjacent to an enemy unit; you then select Tank Unit B and both move and attack with it. Unit A can still attack this turn, simply click on it again and you are able to fire on the enemy.

► Initiative

Initiative is an estimate of a unit's ability to react quickly in combat. Initiative is determined by the equipment used in battle, the terrain upon which the battle takes place, and the experience of the units. It is also adjusted by a random factor, to help simulate the uncertainty of battle. The higher the unit's initiative, the better, since the unit with the higher initiative takes reduced damage. If a tactical surprise or rugged defense occurs, the attacker's initiative is zero.



► Leaders

Every unit has a commander; military forces cannot remain intact without one. However, on rare occasions, a truly exceptional figure rises from the ranks, and leads in an extraordinary fashion, beyond the ordinary capabilities of the average officer. This exceptional quality is now recognized in PANZER GENERAL II as a **leader**. On rare occasions, in battle, when a unit reaches a new level of experience, a star or cross may appear next to that unit's strength tag, indicating that a leader has arisen. Leaders are unique, and each possesses two abilities; one is class related, the other is random. Inspect the unit from the Field Headquarters screen to determine that leader's special abilities.

► Movement

Click on any unit to make it ready for orders. A unit with red numbers on its strength tag has already moved, and a silver bullet next to the strength tag means that a unit has not yet fired. If the selected unit can move, a shaded area appears denoting the hexes to which that unit can move. Units cannot move to hexes occupied by another unit. The exception to this is that an air unit can occupy the same hex as a ground unit or naval unit. You can cancel a unit's move by immediately selecting the Cancel Move button from the Options menu. You cannot undo attacks, nor can you undo moves from which you sight previously hidden enemy units.

Movement Cost

Each unit has a movement point allowance per turn that is spent as it moves. The movement point cost of each hex depends on the terrain in the hex, weather conditions, and the unit movement type. See the Movement Cost by Terrain Type table below, for detailed information on the effect of terrain on movement. Every movement point a unit uses costs one fuel, except that when the ground is covered with snow, all ground units pay double fuel costs, i.e. two fuel points per movement point; snow does not reduce the distance that a unit can move. **Note:** *Because of their operational range, air units have no fuel limits in PANZER GENERAL II.*

Movement ends prematurely if a unit moves adjacent to or is tactically surprised by (moves into) a previously-hidden unit. A tactical surprise is treated as an attack with the defender receiving an automatic rugged defense. Entering a river hex ends a ground unit's movement, except when the river surface is frozen. It may exit river hexes normally the following turn. Dismounted bridging engineers may serve as bridges, eliminating this penalty for the hexes engineers occupy. Some especially wide rivers are impassable, except at bridges.

Movement Cost by Terrain Type

TERRAIN	TRACK	HALF-TRACK	WHEELED	LEG	NAVAL	ALL-TERRAIN
Sand	1/1	1/1	3/3	2/2	1/1	1/1
Forest	2/2	2/2	4/A	2/2	1/1	2/2
Rough, Hill	2/2	2/2	3/3	2/2	1/1	2/2
Mountain	A/A	A/A	A/A	A/A	1/1	A/A
Clear	1/1	1/1	2/2	1/1	1/1	1/1
Bocage	4/4	A/A	A/A	2/2	1/1	3/3
Swamp	4/2	4/2	A/3	2/1	1/1	3/3
Stream	2/2	2/2	4/4	1/1	1/1	1/1
River	A/2	A/2	A/3	A/2	1/1	A/2
River, Impassable	1/1	1/1	1/1	1/1	1/1	1/1
Ocean	1/1	1/1	1/1	1/1	1/1	1/1
Airfield, City, Port	1/1	1/1	1/2	1/1	1/1	1/1
Road, Bridge	1/1	1/1	1/1	1/1	1/1	1/1

Table Explanations

Each movement mode is prepared for different types of terrain. The first number refers to movement through that terrain during fair, overcast, or rainy weather. The second number gives the movement cost for moving through that terrain in snowy weather. An A denotes that entering a hex of that terrain type uses all of the unit's movement points for that turn. The unit may exit normally the following turn. An I denotes that that type of terrain is impassible to that movement mode.

Note: Towed units cannot move on their own, they must use transport, and when moving, use the transport's movement costs. The cost of movement for air units is always one per hex, regardless of terrain or weather conditions.

Mounting and Dismounting Units

A unit which has been assigned organic transport can use that transport to move greater distances during a turn. Organic transport is transport which is permanently assigned to a unit and cannot be shared (i.e., trucks or half-tracks). In campaign play, if you want to purchase transport for an existing unit, or improve the unit's transport, you must Upgrade the unit from the Field Headquarters screen between battles.

A unit can only mount and dismount prior to moving; a unit that has moved via transport must remain in the vehicle at the end of the move. A unit cannot mount, move, and then dismount unless it is infantry under attack; this advantage does not apply if the infantry is tactically surprised. A mounted unit can perform the same actions as a dismounted unit: get replacements, upgrade, disband, resupply, and so on. However, a mounted unit cannot attack.

Note: Mounted artillery and air defense do not provide support fire for friendly units.

Embarking and Disembarking Air and Naval Units

At the beginning of each scenario that uses air and/or naval transport, a number of transport points are given to each side. You cannot purchase them, and if an air or naval transport is destroyed, it cannot be replaced. These numbers represent the allocation of air and naval transports to your army. These transports are used to move units around the map and over the sea. When you move the cursor over a friendly port or airfield, the transports currently available appear in the Information bar at the top of the screen. When a unit embarks, it uses one available transport. When a unit disembarks, it frees one transport. Since there are a limited number of transport points, even if a unit can legitimately embark, there might not be an air or naval transport available, in which case the Embark - Disembark button is not available in the View Unit panel.



Only certain classes of units can embark in a plane: infantry, light anti-tank, and light artillery. Units can only embark on a plane from a friendly airfield hex. Units with organic transport cannot embark on air transport. If the unit is on the airport hex at the beginning of the turn, the unit can embark and move in the air transport during the same turn. Units, with the exception of **airborne** units, can only disembark onto an airfield hex. If a unit disembarks on an unoccupied, enemy controlled airport hex, that airfield is captured. When a unit embarks onto an air transport, the unit icon is replaced by the air transport icon, and uses the air transport's statistics when defending against attack.

Most ground units can use sea transports; naval and air units, and fortifications cannot. Units can embark on naval transports only at friendly controlled ports. Units with organic transport may use naval transport, but the unit is dismounted when it disembarks, regardless of its state when it embarked (mounted or dismounted). Units on sea transports can disembark on unoccupied coastal hexes; they do not need to disembark in a port. Any valid unit that disembarks into an unoccupied enemy port captures it. Remember that only infantry, tank, anti-tank, and recon units can capture cities.

► Multiple Attacks

When a ground unit is the recipient of multiple attacks, its ground defense is reduced by two for every attack after the first, to a maximum of eight. This represents the combat attrition that occurs when waves of attackers wear away at a unit's defenses. Effective use of multiple attacks can defeat even the most powerful units, but remember that your own units are equally vulnerable to attrition!

Prestige Points

Prestige points represent the influence you have earned with the high command by winning battles as quickly and decisively as possible, and taking and holding victory objectives and cities. In the same manner, however, losing cities and battles reduces your prestige. You can exchange prestige points for new units, replacements, and new equipment for existing units.

***Note:** Regardless of the prestige you have earned, in most cases, (the exception being the first three battles of the Blitzkrieg campaign), losing a battle results in your general being dismissed from active service.*

► Ranged Fire

Ranged fire differs greatly from artillery and air defense fire, although those units also can attack at a distance greater than one hex. Some of your units are able to attack at ranges greater than one hex, representing powerful guns that can launch shells a tremendous distance. However, unlike air defense, which targets enemies high in the sky, and artillery, which launches attacks in a high, arcing trajectory, units with ranged fire are affected by terrain. If hills, mountains, cities, forest or bocage lie directly between your unit and the enemy, your unit cannot fire on the target; the terrain makes an effective attack impossible. Your unit must either move to a hex where terrain is not an obstacle, or your unit must move adjacent to the enemy, since terrain does not block the line of fire when units are adjacent to one another.

Note that only units with ranges equal to or greater than your unit's may counterattack when fired upon at range, making ranged fire a powerful tool when used carefully. It is a good idea to check the firing range of possible targets from the View Unit panel before firing; otherwise, your unit may be in for a nasty shock when an enemy you thought vulnerable suddenly returns fire!

Replacements

It is never prudent to allow your units to fight to the point of elimination. The wise general pulls weakened units back from the front lines and calls for replacements, for several reasons. Units with even one strength point left are less expensive to restore to full strength using replacements than requisitioning a new unit entirely. This also preserves whatever battle experience that unit may have gained. This represents the importance of veteran cadres in a damaged unit. Losing units is bad for your prestige, as well.

The importance of preserving units has many tactical implications. For one, you should plan for units which risk heavy losses to shoot before moving, so they can retreat to safety if grievously weakened. The corollary of this principle is, of course, to completely destroy weakened enemy units to keep them from being brought back up to strength.

Rugged Defense

A rugged defense can occur in two ways: if a unit's movement takes it into the hex of a hidden enemy, a tactical surprise occurs (for air and naval units this misfortune is called "out of the sun" and "surprise contact"), which is automatically treated as a rugged defense; also, if an entrenched unit is attacked at close range (from the adjacent hex), by a ground unit, there is a risk of a rugged defense based on the relative experience, the unit type, and the defender's entrenchment level. This represents defending units having the time to create traps, or extremely well defended positions, that the enemy must take great risks to assault. If the entrenchment level is zero, or if the attacker is a pioniere or engineer, there is no risk of a rugged defense.

The concept of rugged defense represents tactical surprise, or the ability to open fire from cover at close range, conditions which favor the defender and can devastate an attacker. Rugged defense really helps infantry, particularly well entrenched infantry. However, repeated attacks disrupt an entrenched unit, forcing it out of its good tactical position, or wearing down its laboriously constructed defenses, and giving the attacker intelligence useful for further attacks.

Spotting Units

All hexes are hidden at the beginning of each turn, except those that are within one hex of a friendly city, port, or airfield or within the spotting range of friendly units. Air units' spotting range is halved by overcast and inclement weather. Other units' spotting ranges are halved when it is raining or snowing.



Once a hex is spotted during a player's turn, it remains sighted for the entire turn. Any time a friendly unit moves and does not cancel its move, it surveys all hexes within its spotting range. Enemy units within your unit's spotting range are automatically revealed. It is important to note that spotting an enemy unit does not necessarily allow direct fire on it; just because a unit has an awareness of an enemy does not mean that it can bring its weapons to bear. For example, a target may be seen moving through ground on the other side of a stand of trees, but the forest prevents your unit from being able to effectively attack the enemy.

► Strength

A unit can start with five or ten strength points. A unit's current strength is given on the strength tag, below the unit's icon on the Battlefield. Casualties taken in battle are represented by a loss of strength points, and a unit reduced to zero strength points is destroyed. Each non-suppressed strength point makes an individual attack on the enemy using the unit's attack and defense values. The number of strength points used for attack is also halved by rain or snow for ground troops and by overcast weather for air units (air units may not attack in rain or snow). It is also halved if the unit has run out of fuel (if it runs out of ammo, it can't attack, though it can still defend itself).

During campaign play, units with experience can have their maximum strength increased by one per experience level, up to a maximum strength of fifteen strength points at five experience levels. Units can add overstrength points at a rate of one per battle by selecting Overstrength from the Field Headquarters screen, between battles. Overstrength units are very potent in battle.

Supply Rules

There are two types of supply: ammunition and fuel. Each time a unit shoots, it uses one point of ammo. Every movement point a unit uses costs it one point of fuel. Exceptions: when the ground is covered with snow, all non-air units use two fuel points for each movement point; air units use no fuel, representing their large operational range.

Automatic Resupply

Each turn, the following automatically resupply: air units which are at an airfield, naval units which are in port, and ground units which do not act. Ground units do not automatically resupply, however, if there are enemy units adjacent to them.

You can also resupply your units, using the Supply button from the View Unit panel. This ends a unit's turn. Again, only air units which are at an airfield and naval units which are in port can resupply. The resupply rate is limited by the proximity of enemy units, terrain, and bad weather. Units normally receive half of their ammo and fuel maximums during resupply. Units receiving replacements automatically receive resupply.

► Supply Points

Supply points are the places where you can deploy requisitioned units. Note that capturing an enemy victory hex, city, or supply point does not convert it into a supply point that you can use, unless it is a port, and naval transport is available. Your country's network of supply lines is only prepared to provide equipment you requisition to prepared supply depots.

Weather Effects on Supply

If it is raining or snowing and a unit is not in a friendly city, port, or airfield, the unit gets less supply. If there are more than two adjacent enemies, the unit may not resupply. Units also get less supply in the desert.

► Support Fire

Under certain circumstances, artillery and air defense units near a defending unit may shoot at an attacker prior to combat. The attacker cannot respond to this defensive fire because it occurs before combat. If all the attacking unit's strength points are destroyed or suppressed by defensive fire, the attack is broken off immediately. Each time a unit shoots it uses one ammo point. Defending units can easily use up several points of ammo in a single turn when defending themselves or nearby units.

Artillery units contribute support fire to nearby ground units, attacked by other ground units, while air defense units give support fire to nearby ground units against air attacks. There are two types of support fire given by artillery and air defense. Units which are directly adjacent to the supporting unit receive close support fire; this means the artillery or air defense uses its full strength against the attackers. Friendly units which are not adjacent, but are attacked by *enemy units who are within range of the supporting unit*, also receive support fire, but the power of the artillery or air defense is halved.

The air unit equivalent of artillery support is interception. Fighters adjacent to defending bombers or ground units may intercept attacking air units, but fighters may make only one interception per turn, and each attacking air unit may be intercepted only once per turn.

Defensive fire from artillery and air defense, as well as interceptions by adjacent fighters, can be powerful tools when used by a careful commander. However, enemy forces can also take advantage of support fire, to devastating effect on your attacking troops. Always be sure to check the range of enemy artillery and air defense before launching assaults in their vicinity, and plan attacks on supported units carefully to minimize damage to your own forces. The proper use of recon units, to scout out enemy artillery and air defense clusters, can also prevent you from making a costly mistake, when unseen artillery two or three hexes away disrupt your assault on an enemy unit.



Suppression

Suppression represents the effect being attacked can have on a unit's strength, other than the loss of strength from casualties. Troops in combat may become disoriented, wounded, or pinned down, all of which render them ineffective in combat. During an attack, some or all of a unit's strength points may become suppressed. Suppressed strength points are not available during the attack. Most suppression lasts only for the duration of a single combat, but tactical bombers can suppress units for the player's entire turn, facilitating further attacks on the suppressed unit. Defending units whose suppression number is greater than or equal to their current strength, retreat, surrender, or are destroyed.

Note: *Defensive Artillery fire suppresses for the attacking unit's entire combat.*

Terrain

Careful analysis of terrain is vital to a well conceived and executed battle strategy. Terrain affects movement, since some types of ground are more difficult to negotiate than others. See the "Movement Cost by Terrain Type" table on page 46 for more information. Also, some types of terrain provide greater base entrenchment, making those areas more defensible, and more difficult to clear of enemy defenders. See the "Entrenchment" section for details on the effect of terrain on entrenchment.

In difficult terrain, such as cities and mountains, defending and attacking infantry shoot against the close defense number of the enemy unit, usually placing the non-infantry unit at a severe disadvantage. The exception to this being that infantry may attack another unit that succeeds in putting up a rugged defense, in which case the attacker shoots at the defender's ground defense value. Infantry and artillery can be highly effective when defending from difficult terrain, particularly against larger vehicles, such as tanks, which have difficulty bringing their full power to bear. Conversely, tank and self-propelled anti-tank units, which have difficulty in cities and forests, can be dominant in clear terrain, where defending infantry and artillery need to be entrenched to survive an armored attack.

Rivers

Rivers are a terrain type that deserves special mention. Entering a river hex ends a ground unit's movement, except when the river is frozen. It may exit the river hex normally the following turn. Dismounted bridging engineers may serve as bridges, eliminating this penalty for the hexes engineers occupy. The bridging engineers can also bridge rivers where there is no ford. When a bridging engineer unit moves into a river hex, a pontoon bridge appears. Friendly units may then move over the bridge icon. **Note:** Some *rivers are too wide to cross with bridging engineers*.

Using Artillery and Air Defense

Since artillery units make arcing, ranged attacks, they can attack with no risk of losses by bombarding distant enemy units. Air defense also is able to attack their lofty targets without fear of retaliation. However, since many air defense and artillery are towed weaponry, you must mount them if you wish to move them to another location. Remember that units mounted in trucks or half-tracks defend poorly, and cannot launch an attack or provide support fire. Do not move these units too close to enemy units; use their ranged attacks to their advantage, especially since, even dismounted, these units are vulnerable to attacks by tanks and infantry. Because of the nature of their targets and weaponry, terrain has no effect on artillery and air defense attacks and defensive fire.

Victory Conditions

Battles are won by taking or holding some or all of the Victory Objective hexes, which are represented by hexes with gold-bordered flags on the Battlefield and Strategic Map. Capturing towns, supply points, ports, and airfields that are not Victory Objectives gains you prestige points, but does not affect the victory conditions, so you should always focus on capturing the objectives you have been ordered to take. Only units of the tank, anti-tank, recon, and infantry classes can capture cities, ports, and airfields, although other troop types can occupy them and prevent their use by the enemy.

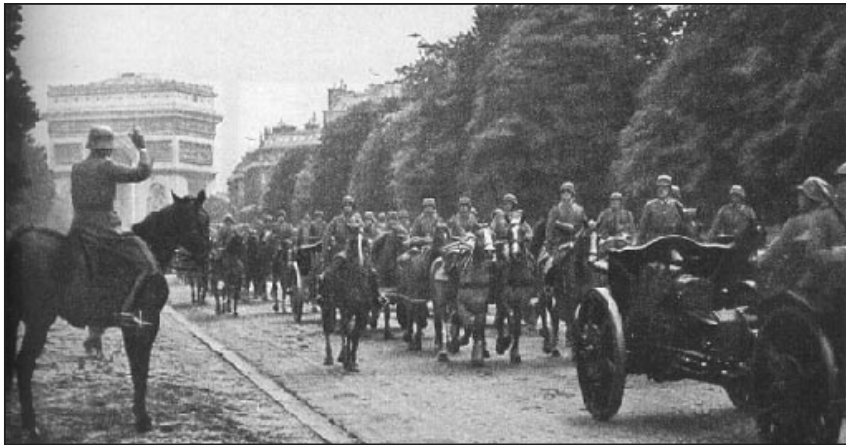
Weather

Weather is randomly determined based on actual weather conditions for the area and month of the year in which a battle occurs. Weather may change between fair, overcast, rain, or snow. Storm fronts can last for a number of days and have the possibility of generating only overcast weather or becoming rain-storms or snowstorms. It never rains or snows in North Africa. **Note:** *During rain or snow storms aircraft and air defense cannot attack*.

Bad weather generally helps the defender and the side with air inferiority because of the inability of air units to attack during bad weather. Interludes of bad weather are good times to resupply and rebuild units while waiting for the weather to clear. You can check on the current weather conditions of the game by clicking on the Status Report button from the Additional Options panel on the Main Game screen.

Zone of Control

A unit exerts a zone of control over the six hexes around it. Surface units' zones of control affect only surface units and air units' zones of control affect only air units. When you move a unit into the zone of control of an enemy unit, your unit's movement is stopped and it must either attack or end its turn, unless it is a recon unit. If your unit was ordered to move to a point which takes it through a hex occupied by a previously hidden enemy unit, your unit is surprised by the enemy unit, and your unit's turn ends after combat is resolved.



CAMPAIGN DESIGN NOTES

While it's probably not possible to provide "truth" about any historical event, PANZER GENERAL II does give the player much the same kind of choices as those facing his or her historical counterpart.

No single general fought all of these battles, but they could have: the campaigns are designed to leave enough transit time between scenarios for a player's core units to have time to move to the new battlefield.

Blitzkrieg

From the civil war in Spain, to the "lightning" victories of early World War II and beyond, the Blitzkrieg campaign offers a large variety of challenges to the aspiring general and is the centerpiece campaign of PANZER GENERAL II.

Madrid Offensive

The Civil War in Spain provided a testing ground for the German Wehrmacht, as well as the Soviet and Italian armies. The Luftwaffe's Condor Legion air wing is the best-known German formation to have assisted Francisco Franco's Nationalist army, but the German Army also sent a small motorized unit, including a number of tanks, to Spain.

In the battle of Guadalajara, northwest of Madrid, both sides committed some of their best units as the Nationalists tried to cut off Madrid, still held by the Republic despite repeated attacks. Franco sent in the tough Moroccan brigades

of the corps-sized Soria Division, and the Italian "volunteer" corps, the CTV, provided three divisions of Blackshirts and the Littorio division. This last was supposedly a regular army division, though the army had as little to do with it as possible. The troops were in their 30s, unemployed workers who had signed up either as colonists for Libya or Ethiopia, or for work as extras in the movie *Scipio in Africa*, then in production in Libya. They were deeply surprised when their ship docked in Cadiz, they received rifles and uniforms, and they learned that they had volunteered to fight Communism.

The Republic committed some of its own top units, including the elite 11th Shock Division and a number of International Brigades including the "Garibaldi Battalion" of anti-fascist Italians, which successfully induced over 1,000 CTV soldiers to desert with promises of fair treatment, and then massacred them. Also present were a brigade of Germans and Austrians, the extremely tough Spanish El Campesino Assault Brigade, and the Soviet-manned 1st Tank Brigade with over 100 T-26 and BT-5 tanks.

Guadalajara proved a disaster for the Nationalist cause, especially for the CTV. Madrid would hold out for two more years as the war continued in Spain.

Ciechanow

The Poles put up a pretty stiff defense against the Wehrmacht here. Though Mława lies almost directly north of Warsaw, the German objectives actually lay to the east and south, toward Ciechanow. German leaders considered it politically very important to present eastern Poland to the Soviet Union as a gift, rather than have the Soviets conquer it for themselves. The Kempf panzer division, a hastily thrown-together outfit which later became the 10th Panzer Division, was supposed to move quickly past the frontier fortifications and head for Brest-Litovsk on the new German-Soviet border. Instead, the Poles inflicted serious damage on the panzer unit, and it did not participate further in the Polish campaign. Polish cavalry in turn invaded East Prussia, deeply embarrassing the German army.

Players should not be misled by the quick conquest of Poland in the historical campaign. Individual Polish units fought very hard for their country, and where they faced fairly even odds, the Poles often frustrated the German advance. The Polish regular infantry is at least as good as its German counterpart, though it is not nearly as well-supplied with modern artillery. The Polish reservists are no worse than the German Landwehr division. The Polish cavalry is superior to the German cavalry brigade. Unfortunately for the Poles, it has nothing to match even a second-rate panzer unit like the Kempf division.

Suomussalmi

PANZER GENERAL II is designed to give players the opportunity to fight in all types of climates and conditions, and this one presents quite a challenge. The Soviet juggernaut looked unstoppable as it rolled into central Finland late in 1939. The invaders even brought along a brass band to serenade the oppressed workers of the Suomussalmi district.

However, the Finns struck back furiously, surrounding and destroying one Soviet division after it captured the town of Suomussalmi, and then giving the same treatment to a second Soviet division that tried to rescue the first one. The battle is still used as a training exercise at military academies around the world.

No German troops fought in the actual battle. The Finnish government begged foreign nations for aid, especially Britain and France, and hoped to see some troops arrive in time to fight the Soviets. Although Germany and the Soviet Union had signed a non-aggression pact and acted as unofficial allies during this period, the presence of German troops under a "volunteer" facade was not at all out of the question. Soldiers and airmen from Germany's Axis partners Italy and Hungary fought on the Finnish side as volunteers, as did about 8,000 Swedish troops.

Lillehammer

During the First World War, the German Navy proved unable to break out of the North Sea and Germany slowly starved to death under Allied blockade. The next time, German planners made sure they'd have open access to the Atlantic - and to year-round shipments of Swedish iron ore - by seizing Norway.

Lillehammer, now known as a winter sports mecca, sits astride the most important communication routes of south-central Norway. German troops sought to drive northward up the long mountain valleys from Oslo toward Trondheim, and the other Atlantic ports. The Norwegians, with some British help, dug in to try to stop them.

Officially, only one Norwegian division fought in this battle, but it seems to have had significant help from reservists arriving at the front, and Norwegian soldiers escaping from another division surrounded to the west of this battlefield. The Norwegian infantry fought hard and made good use of the incredibly mountainous terrain, but had little artillery and nothing to stop even the light tanks deployed by the Germans.

While their British allies did not make nearly as good a showing, the Norwegian troops fought very well. It finally took a landing by paratroopers in their rear area to dislodge the Norwegians from their positions.



Like Suomussalmi, if you are playing in campaign mode, this scenario encourages a balanced core combat group. Infantry is very important here.

Sedan

The German plan for the 1940 campaign in the west centered around a strike through the dense Ardennes forest, and emerging at Sedan to drive across France to the English Channel. Sedan represented a formidable barrier to these plans, with the Meuse River and some pre-war fortifications to help the French defenders.

The German force here was one of the best. It consisted of two elite, full-strength panzer divisions, another fairly good panzer division, and an elite independent regiment. Historically, these forces (the XIX Panzer Corps) were led by the famous General Heinz Guderian, the father of blitzkrieg theory. At Sedan he proved that he was no mere paper theorist.

Along with some reservists, better classed as an armed rabble, the French had some good units to oppose the Germans, including reinforcement by an armored division with better tanks than the German panzers. The French lacked the combined arms practices of the German panzer divisions, and when their tanks ran out of fuel, which happened rather quickly, they had to depend on vulnerable tanker trucks to refuel them, rather than the gas cans used by the Germans.



Race To Dunkirk

The Allies attempted to hold back the panzers from the beach zone, while the Germans sought to drive forward far enough to bring the evacuation zone under their control.

Though the Germans had the strategic advantage at this battle, their troops and equipment were exhausted from the quick drive across northern France. Meanwhile, the Allied armies, which had retreated from Belgium into the Dunkirk area, included many of the best French and British units, and a number of these had seen little or no action. While much has been made of the German decision to "let the British get away," in reality, many German commanders feared a disastrous result should they push their worn-out, overextended troops into a battle with the fresh, nearly full-strength Allied units in the Dunkirk pocket.

An aggressive German drive here is the battle which, from their point of view, they probably should have waged, and which the rest of the world is thankful they did not. British propaganda did a masterful job of turning the Dunkirk evacuation into a victory, but in fact it was a terrible defeat which could have been even worse. It is the task of the German player to make it so.

Windsor

This battle never happened, but could have, given quicker German success in France followed by a landing in Great Britain. Only a highly successful German player sees this scenario in the course of the campaign.

Assuming the German forces could get across the English Channel in the face of the Royal Navy and the Royal Air Force, both of which could be expected to resist literally to the last man, ship, and plane, they would have to establish a beachhead and drive inland. Once ashore, the prize would be London, the British capital and industrial center.

The British could be expected to pour every possible reinforcement into the battle for London. The Germans would have to isolate the great city before they could even contemplate the block-by-block conquest. To do so, the road and rail net leading to the important ports and industrial centers to the west and north of London would have to be cut. Many of these run near Windsor, to the west of London, and in this scenario the German player must cut these lines against fanatical British resistance.

There is also an opportunity for the German player to land in England in 1943, following the defeat of the Soviet Union. While this scenario takes place on the same map, the forces involved are quite different. The British defenders of 1943 are just as determined as those of 1940, but much better armed.

Pursuit To Tobruk

Tobruk is a small port in Libya, not far from the border with Egypt. Allied forces in Egypt invading the Italian colony of Libya would have to secure this area before continuing the campaign. Otherwise, there would be no port at which to land supplies, and forces from Tobruk could easily cut their supply lines running back to Egypt. The Italians therefore built a modern, well-equipped fortress at Tobruk in the 1930's, but the British captured it fairly easily in 1940. When Axis forces led by Erwin Rommel drove the British back out of Libya into Egypt, they faced the same need to capture Tobruk before continuing their offensive.



In the actual campaign, the Allies had little trouble inserting the forces they desired into the Tobruk fortress before continuing their retreat into Egypt. This scenario requires the Axis player to drive quickly enough to keep this from happening.

Tobruk

The Australian defenders of Tobruk faced up to the Axis siege with great success. Despite repeated attacks and a lengthy siege, the garrison could not be cracked and Tobruk remained in Allied hands, though the South African and Indian defenders of the fortress a year later had much worse luck.

While they were well-suited to warfare in the desert, the German panzer divisions and the Italian armored formations were not designed for frontal assaults against fortifications. Though the Italian infantry proved to be tough fighters, especially at night, supplying an infantry force large enough to invest and capture Tobruk by siege proved very difficult.

The Axis forces eventually tried to bypass Tobruk instead, building a new road south of the fortress. This eased the supply situation somewhat, but not enough to mount a full-scale invasion of Egypt. Once again, the German commander is trying to change the historic result of this battle.

Thermopylae

If the General Staff doesn't think all that highly of your accomplishments, then all roads lead to Athens. Leonidas and his Spartans held the pass at Thermopylae, against the massive Persian armies of Xerxes, long enough for the Greeks to rally and eventually defeat the Persians. In 1941, the Australian and New Zealand defenders of the pass were just trying to hold back the panzers long enough for the Royal Navy to evacuate the ill-fated British expedition to Greece.

While the Greek army fought off the Italian invasion in late 1940 fairly successfully, the Greeks were in no position to mount a serious defense against the German invasion which followed in the spring of 1941. With their best divisions facing the Italians, and few anti-tank guns, the Greek defense quickly crumbled.

British Prime Minister Winston Churchill ordered a number of divisions out of Libya to help prop up the Greek army. These units fared little better than had the Greeks, and soon the same divisions, minus their equipment, were lining up to board British warships for the return trip to North Africa. The German player's task is to push through Thermopylae to stop this evacuation.

Malta

Sitting astride the sea lanes between Italy and Libya, the British-held island of Malta proved a major nuisance to Italian efforts to push supply convoys across the Mediterranean Sea. Therefore, the Italian general staff, the Stato Maggiore, drew up a plan for the island's conquest, known as C3.

Italy's German allies soon demanded a leading role for the invasion they now called Operation Herkules. Where the Italians had planned to overwhelm the Allied defenses by landing infantry divisions all around the island, the German plan put its faith in airborne landings. German and Italian paratroopers would secure the most important points, and reinforcements would then come over the beaches to finish off the island's garrison. The Axis never found themselves in a position to assault Malta, but the German player can find himself ordered to tackle the island.

This is one of the game's smallest maps, and provides a change of pace with a rare (as regards PANZER GENERAL II) naval conflict as part of the action.

Kishinev

Romania joined the Axis alliance to seek vengeance on its neighbors, Hungary and the Soviet Union. Each of these, with German connivance, snatched entire provinces in 1940. When German diplomats carefully broached a possible invasion of the Soviet Union, Romanian leaders jumped at the chance to regain the lost province of Basarabia. Romania was the only Axis ally privy to German plans for Operation Barbarossa, the invasion of the Soviet Union.



While the Romanian army was fairly large and contained some excellent units, it lacked modern equipment. Tanks especially were in short supply, and Romanian leaders sought at least one panzer division to aid in the drive to Kishinev, the capital of Basarabia. This help was not forthcoming, but in the campaign game you, the player, are dispatched to aid in this attack. The scenario begins almost two weeks after the start of Barbarossa, and thus the Soviet divisions in this sector have been able to bring themselves almost to full strength, and their commanders are far less confused than those who faced the first German assault.

Novgorod

Staraya Russa, south of Novgorod, was an important communications center and the Soviets fiercely resisted German attacks here. Though the Germans made some progress, the Soviets prevented a complete breakthrough. A powerful Soviet counterattack in this area would later trap many of the lead elements of this German attack in the so-called "Demyansk Pocket."

German panzers had great difficulty in the swamps and heavy forests of north-central Russia. Also, Soviet resistance grew stronger the longer the campaign continued.

The Soviet opponents here include several formations added to the Red Army in 1940 when the Soviet Union annexed the Baltic States of Lithuania, Latvia and Estonia. The 180th Rifle Division was formed from two Estonian divisions and the 183rd from two Latvian divisions. Both still used a bizarre array of weaponry, which the two small nations had purchased from all over the globe.

Volokolamsk

Perhaps the proudest name in Russian/Soviet military history, but one rarely seen in Western history books. It was on the Volokolamsk Highway that commissar V.K. Klochkov of the 316th Rifle Division told his men, "Russia is huge, but there is nowhere to retreat. Moscow is behind us."

Outnumbered and outgunned, the Soviet troops fended off some of the German army's best divisions. German generals claimed their late October pause before Moscow was due to mud and supply shortages; the real reason was the courage and sacrifice of the Soviet soldier.

The Germans hurled their excellent 2nd and 5th Panzer Divisions into the battle. These units had lost their tanks when a British submarine sank the transport carrying them after the conquest of Greece, and entered the Russian campaign many weeks later than the rest. By this point, a full-strength panzer division with brand new tanks should have been unstoppable. The 78th Siberian Rifle Division stopped them cold. Short of rifles, volunteer factory workers in the 18th People's Militia Division fought the Germans with their bare hands. Despite massive casualties, the Soviet line held and Moscow was saved.

Klin

With the Volokolamsk Highway firmly blocked by its fanatic defenders, the Germans tried another route to the northeast of Moscow. Once again Soviet troops fought fanatically to defend the capital. With fresh reserves committed to the battle, the Soviets began a series of counter attacks. Soon the Germans found themselves fighting desperately to escape the Soviet trap.

The Germans probably had only the slimmest of chances to actually capture Moscow in late 1941. Political decisions diverted the panzers south for several key weeks during the autumn. By the time they returned to the drive on Moscow, it was already too late. Even an early attack on the Soviet capital had no guarantee of success, since the fanatical defense at Volokolamsk and Klin would surely have been repeated in the streets of Moscow itself.

There was also no guarantee that the capture of Moscow would have driven the Russians out of the war. Napoleon certainly learned that lesson in 1812. The loss of Moscow would have crippled the Soviet railroad system and cost the Soviets many important factories. It would not have crushed the will of their people to resist the Germans.



Savannah

Savannah has been an important commercial and military port since its founding, and any invader of North America would eventually have to try to take it.

The American infantry divisions are determined to repel the invaders. Each of these divisions had impressive war records. The 2nd Cavalry Division did very well in maneuvers, but upon reaching the North African theater it was broken up to provide manual labor to unload ships, a sad end to the proud history of the "buffalo soldiers."

Oak Ridge

Deep in the mountains of east Tennessee, Project Manhattan - the American program to build an atomic bomb - built an entire city in great secrecy. Here scientists built key components of the bombs that brought an end to the Second World War. Oak Ridge remained closed to the public until 1949, and its existence was only admitted in 1945.

The Germans have their best weapons of the game at their disposal and some excellent units to use them. Standing in their way are some of the toughest enemies they will face. Bob Dole's 10th Mountain Division is supported by the Tennessee Volunteers. The Texas Rangers are present, as are the valiant Polish exiles and the elite 3rd "Spearhead" Armored Division.

Onward To Berlin

You now have the opportunity to lead Soviet troops to the final victory. The Soviet campaign picks up once the tide has started to turn in the east, and the Soviets are on the offensive. Should you emerge victorious, the party will be greatly pleased that you have properly followed its doctrine. Should you lose, you get to keep the blame all to yourself.

Saturn on the Chir

In Stalingrad, the Germans had been stopped by determined resistance. The lines to the southeast and northwest of Stalingrad were held by allied armies from Hungary, Italy and Romania. Though these forces included some very good troops, all were short of tanks and especially short of anti-tank guns. The Soviet high command saw this as an opportunity to trap the German Sixth Army in Stalingrad.

This scenario takes place to the northwest of Stalingrad, in a vital sector held by Romanian troops. The Romanian infantry was probably about equal to the Germans on the defensive, but these divisions had much less artillery than a German division and very few anti-tank guns.

The Soviet offensive shredded the Romanian line. Of the two Axis armored divisions present, the Romanian Royal Armored Division fought very well despite its worn-out tanks. German officers and some historians later claimed that the 22nd Panzer Division performed so badly because mice had eaten the wiring in the tanks - the military equivalent of "the dog ate my homework." The scenario, therefore, takes its Axis positions from more reliable Romanian sources.

Soviet troops closed the Stalingrad pocket and trapped the Sixth Army, which finally collapsed in February, 1943. The Soviet drive to Berlin had begun.

Prokhorovka

Inevitably, this game had to include a scenario from the legendary tank battle near Prokhorovka.

By the time German troops and equipment had been gathered for the carefully planned attack at Kursk, the Soviets knew exactly where the attack would come and prepared for it. After the German tank units had been worn down by fortified anti-tank guns protected by infantry, the Soviet tank brigades hurled themselves on the panzers and a wild battle between hundreds of tanks followed.

Kanev

This scenario features Soviet airborne troops, but the focus, as in the real battle, is getting the Soviet tank corps over the Dnepr River, and losing sight of this goal will result in defeat.

The Soviet Union was the first nation to train soldiers as paratroopers, though the early units did not wear parachutes: the planes flew as low and slowly as possible and the soldiers were instructed to look for soft places like swamps and snow banks to jump into! Scattered Soviet paratroop landings took place during the Winter War with Finland in 1939-40, and a large number of paratroopers were trained and ready when the Germans invaded in 1941.

These tough soldiers soon put away their parachutes and headed for the front lines, where most were destroyed though they all fought fiercely. The Soviets continued to train paratroopers, and set up new brigades. When their offensive ground to a halt before the Dnepr River south of Kiev, the Soviet high command committed the paratroopers to force a river crossing.

The jump did not go well, with men scattering far and wide on both sides of the Dnepr, but it did cause the Germans some trouble in the rear areas. In the game, the Soviet player must realize that his paratroopers are there to slow down German reinforcements by blocking the roads leading to the front. The battle's outcome depends on the tank corps, which must cross the river and capture the vital Kanev Bridge.

Leningrad

For 900 days the "Hero City of the Soviet Union" suffered under German air and artillery bombardment. In spite of this, Leningrad held out, and the Germans feared the fanatic resistance they would encounter within the city.

In the spring of 1944, the Soviet armies outside Leningrad had finally broken through the German lines and opened supply routes. Food, weapons, and reinforcements poured into the city. The Germans held onto their remaining positions outside Leningrad, and were trapped there when the Soviets launched their counter-offensive.

Viipuri

June, 1944 brought a massive Soviet assault on Axis ally Finland, culminating in the "Black Day of the Finnish Army." This is the battle covered here, south of Viipuri.



The Finns had refused to launch a direct assault upon Leningrad, officially because they had signed treaties promising never to do so; in reality because they feared the tremendous casualties such an attack would bring. The Soviets could not tolerate the Finnish threat so close to Leningrad, however, and in the summer of 1944 mounted a powerful assault aimed at capturing the city of Viipuri, known to the Russians as Vyborg.

The Finns committed their only armored division to defend the city, but its worn out captured Soviet vehicles and German-made assault guns were no match for the modern Soviet T-34s and KVs. The Soviets deployed vast numbers of artillery pieces, and supplied them with mountains of ammunition. Under this barrage the Finnish infantry broke. A German division committed to the front fared even worse. Soviet victory here soon forced Finland to make a separate peace.



Seelow Heights

The final breakthrough before the battle for Berlin itself occurred just to the east of the city, along the line of the Oder River. The Soviets reached this line in late 1944, but with their supply line stretched beyond the breaking point, the offensive ground to a halt. Rather than push the Soviets away from the capital, the Germans then launched their offensive to regain Budapest (seen in the Operation Konrad scenario).

When the Soviets finally brought up enough troops and supplies to launch the final drive on Berlin, they did so with overwhelming force. The Seelow Heights marked the last place before the city offering good defensive terrain. The motley German force ranged from crack panzer instructors to hastily-drafted police.

On the Soviet side, the manpower pool was also nearly exhausted. The capture of Berlin was no sure thing; Soviet strength had almost given out, and only the deep desire for revenge and to crush the German political leadership drove the Soviet armies forward.



Crusade in Europe

The tide has turned. After a long struggle, the Allies return to Europe; their goal—the unconditional surrender of the Axis powers. You now lead American or British forces into battle, starting with the Salerno landings in 1943.

Salerno - Return To Europe

Allied troops returned to Europe to stay in September, 1943, with a landing on the Italian mainland. The Allied forces landing at Salerno, just south of Naples, did not know whether the Italian troops they expected to meet on the beaches would be friends, foes, or neutrals.

Instead they found a full-strength, experienced German panzer division waiting for them. The struggle for the beachhead was intense, but with the help of the 82nd Airborne Division, tough commandos, and rangers, the joint American-British landing force held their own, and eventually captured Naples.

Advance On St. Lo

While the British drive bogged down in front of Caen, the Americans secured their beaches and the large port of Cherbourg in preparation for a full-scale breakout. Backed by wave after wave of heavy bombers, the US First Army struck the Germans near St. Lo at the western end of the Normandy front lines.



The air attack caused incredible devastation. The bomb craters overlapped, and most of the front-line German troops simply disappeared. American troops found tanks flipped completely over and a handful of dazed survivors. The US units moved through the bomb zone, and handily defeated the German reserves rushing to fill the gap.

Caen

British commander Bernard Montgomery promised the Allied command that his troops would capture the old city of Caen on the first day of the Normandy landings. However, the Germans were able to pour in reinforcements because the slow, methodical British tactics allowed the Axis to move their troops practically at will. Weeks of hard, bloody fighting passed before Montgomery made good on his promise.

Arracourt

The American capture of the important industrial and communications center of Nancy brought a quick German response. While the German army which faced the Allies had essentially disintegrated during the retreat across France, new armored formations had been raised and some old ones re-equipped with new panzers.

These new and refitted panzer units struck the Americans at Arracourt, just east of Nancy. Though outnumbered, the GIs, with leadership from future chief of staff Creighton Abrams, stopped the German attack and launched a devastating counterattack.

The PANZER GENERAL II scenario begins the action some days before the actual tank battle, making the American player take Nancy first.

Metz

Metz is only slightly to the north of the Arracourt battlefield, a fortress city that had been an American target during the First World War. French leaders had convinced the US commanders to switch to another objective, which American generals believed to have been a serious error, and one studied closely between the wars. When Metz again figured in American plans, the American leaders were determined not to make the same mistake.

The city's fortifications dated back to the late 19th century, but the Germans had modernized many of them. The defenders included the usual motley assortment of over- and underage draftees. However, Metz also contained training schools for officers and NCOs, where the best and brightest soldiers from the ranks went for further military education. From Metz's classrooms, the local commandant was able to raise several regiments of these men. Though these units had been quickly organized, every man in them had been decorated for bravery, and they fought furiously to hold Metz.

Dessau

As the war in Europe drew to a close, the shape of post-war Europe became a concern, especially the disposition and possession of advanced technology taken from the Germans. When orders came to attack toward Dessau and capture the experimental airfield there, the division leading the assault, the Third Armored Division, swept into the area before German engineers could touch their secret files and experimental models. New technology in rockets and jets fell intact into American hands.



Defending the Reich

While Germany was on the strategic defensive from the summer of 1943 until the Soviet conquest of Berlin two years later, German troops conducted many operational offensives during this period. Usually, these attacks were designed to repel Allied attacks, or to restore defensive lines. This is the toughest of the PANZER GENERAL II campaigns.

Winter Storm

The Winter Storm operation was designed to force its way through the Soviet forces ringing Stalingrad and re-supply the troops there.

German doctrine called for attacking an enemy penetration at the base, where they had broken through the defensive lines. This scenario is based on the attempt to do just this, in an area where Soviet tank forces had shredded the Romanian infantry divisions guarding the area. The best Axis units present were actually Romanian cavalry and armored divisions.

Zitadelle

Operation Citadel (Zitadelle), was compromised before it began by the wait for new tank types and Soviet knowledge of the details of the German offensive. This scenario is one of the largest in PANZER GENERAL II, both in the size of the

battlefield and the number of units present. The map covers Belgorod in the south, and extends north to Prokhorovka. This area saw one of the largest tank battles of World War II.

Invasion Salerno

When the Allies started landing troops at Salerno, they expected to find little or no opposition. Instead they faced a potent counterattack force led by the tough and experienced 16th Panzer Division, reinforced by the famous Hermann Goering Panzer Division.

The war proved that a properly planned amphibious assault, supported by massive naval gunfire, was difficult if not impossible to repel. At Salerno the Germans, who didn't know this, almost crushed the beachhead and might have done so with just slightly better luck.

Drive To The Sea

For well over two years, the German high command had known that the Allies would eventually try to land somewhere in France. The so-called "Atlantic Wall" of fortified beaches existed mostly in German propaganda. The Germans did put up concrete pillboxes and steel obstacles at obvious landing points all around Europe. These were backed by German infantry divisions, usually made up of overaged conscripts, young boys and even whole battalions of drafted foreigners including former Soviet soldiers. These men were either unable or unwilling to put up much resistance, and many deserted at the first opportunity.

Knowing the fragile nature of his beach defenses, the famous German Field Marshal Erwin Rommel insisted that powerful panzer divisions be placed behind the beaches to counterattack Allied landings. When the Normandy landings came, the high command took many hours to release the panzers, and only one panzer division launched an attack on the Allied beaches. The 21st Panzer Division had a proud combat record from North Africa, but most of its men were new recruits and its tank battalions contained a bizarre array of captured enemy equipment, including French tanks left over from the First World War.

The 21st, incidentally the only German panzer division in France considered unfit for front line service, actually managed to penetrate very close to the beaches. However, the player must do better than this, and inflict a severe enough defeat that the Allies begin evacuating the beaches.

Nordwind

It did not take long for German leaders to realize that the Ardennes offensive (known in the West as the "Battle of the Bulge") had failed. The Germans immediately launched another attack slightly to the south of the Ardennes.



Though some American troops had been pulled out of the line to help in the Ardennes, plenty remained in this sector, and they were fully alert and awfully angry. The American units bent, but did not break, and the Germans could not break through. American counterattacks drove the Germans back behind their original starting lines, and before the operation was complete, German panzer units were boarding trains for Hungary and Operation Konrad.

Operation Konrad

In January 1945, with the Ardennes and Nordwind offensives clear failures, and Soviet troops less than 100 miles from Berlin, the German High Command launched a series of new offensives in . . . Hungary.

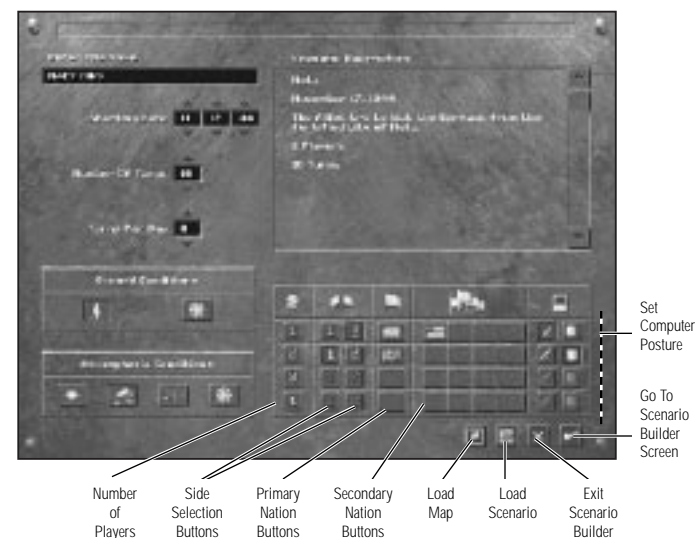
The break between this scenario and the preceding Nordwind scenario is the shortest in the game. While this does not give the player's core units much transfer time, most of the assault divisions participated in either the Nordwind attack or in the Ardennes, which wrapped up about the same time. Operation Konrad, known also as the Battle of Szekesfehervar, had top priority on the German rail system.

Inside Budapest, the German garrison held out. Several attempts to break through during the winter and spring of 1945 failed, and Budapest eventually fell to the Soviets.

SCENARIO BUILDER



For those who enjoy recreating famous battles, or envisioning “what if” situations, PANZER GENERAL II lets you create your own scenarios, both single and multiplayer. From the Start screen, click on the Start The Scenario Builder button. This brings up the Scenario Parameters screen.



The Scenario Parameters Screen

The Scenario Parameters screen is where you define the general settings of your scenario, such as number of players, weather conditions, and AI posture.





To begin building your scenario, click on either the Load Map or Load Scenario buttons, at the lower right corner of the screen, to bring up a panel, listing the available maps or scenarios for you to edit into your own scenario. Click on a name to select the map or scenario, and click on the **check mark** button to return to the Scenario Parameters screen. Click on the Exit button to remove the panel without choosing a map or scenario.





On the top left of the screen is a text box, in which you need to enter the file name of the scenario you are going to build. When you save your scenario, PANZER GENERAL II automatically adds the appropriate extension to the filename, and saves the file in your **PANZER2** directory.

Below that is a counter, giving the Starting Date of your scenario, in numbers representing the month, day, and year. The default setting is 12/7/41, but you can adjust this date by clicking on the arrows above and below the numbers. The Starting Date of your scenario can affect which equipment is available for your armies, since some units were not yet developed early in the war, while others had become obsolete later in the war.

Set the Number of Turns in your scenario by clicking on the arrows above and below that counter. The number is initially set at ten, and can go as high as thirty turns.

Set the number of Turns Per Day by clicking on the arrows above and below that counter. This number is initially set at one, and can go as high as three turns per day.

  The Ground Condition box contains two buttons, one indicating Dry ground conditions, the other, Frozen ground. The depressed gold tone button is the current Ground Condition; click on the other button to change the default.

    The Atmospheric Conditions box, in the lower left corner contains four buttons, indicating Fair, Overcast, Rain, and Snow. Choose one of these conditions for your scenario; the depressed gold tone button is the current Atmospheric Condition.

The upper right quarter of the screen is dominated by a text box, in which you can enter a summary of your scenario, or change the summary, if you are modifying an existing scenario. Click inside the box, and when the cursor appears, type a description.

In the lower right quarter is a Player Settings box, in which you set the number of players, determine sides and country assignments, and control AI posture, if applicable. You can design a scenario for up to four players, simply click on the number of players you want in your scenario, the first column in the Player Settings box. The next column determines which side players are on. Choose sides by clicking on either number 1 or 2 for each of the players in the scenario.

The next section defines each player's primary nation. A player can have only one primary nation. To assign a primary nation, click on a button in this column and a box containing fourteen flags appears. Click on a flag to select it as that player's primary nation. If a flag is already there, you can still change it by clicking on it and selecting a different flag. Click on the **Exit** button in the upper right corner of the flag box to remove the flag box.

In addition to one primary nation, each player can also have up to four other nations as part of their forces. If you want players to have other nations in their forces, click on one of the four buttons next to a primary nation, and then select other nations by clicking on their flags.

The last column contains two buttons for each player. These determine the posture of the AI for a computer-controlled player, aggressive or passive. Click on the **sword** button if you want the computer-player to take an aggressive stance. Click on the **shield** button if you want the computer-player to take a passive stance.

When you are satisfied with your settings, click on the **check mark** button to continue to the Scenario Builder screen. If you decide not to continue making a scenario, click on the **Exit** button to return to the Start screen.


The Scenario Builder Screen

The Scenario Builder screen resembles the Main Game screen. It is dominated by the Battlefield, Information bars bracket the screen, top and bottom, and an Options menu along the right side controls most of the Scenario Builder functions.


Scenario Options Menu

The number in the upper right corner indicates the active player. Click on the arrow buttons to scroll through the active players. If you pass your mouse cursor over the Scenario Options buttons, smart text appears next to the button, describing its function.

Designate Supply

 When activated, every hex you click on is designated as a supply point for the currently selected player, and the ownership flag is framed with a green border. Players on the same side can share supply points, simply assign the same hex as a supply point for both players. Also, hexes can be designated both supply and victory hexes. **Note:** *Supply points, and the six hexes around them, are automatically designated deployment zones.*

Designate Victory

 When activated, every hex you click on is designated as a victory hex for the currently selected player, and the ownership flag is framed with a gold border. Players on the same side can have the same victory hexes, simply assign the same hex as a victory hex for both players. Also, hexes can be designated both supply and victory hexes. **Note:** *Each side must have at least one victory hex under enemy control at the start of the scenario.*

Designate Ownership



When activated, clicking on a hex establishes that the current player owns that hex. A nationality flag is placed in that hex. To toggle through that player's countries click on the nationality flag. Again, remember that at least one victory hex for each side must be controlled by the enemy at the start of a battle.

Designate Deployment



When activated, every hex you click on is designated as a deployment hex, for the currently selected player, and darkens. Players on the same side can share deployment zones, simply assign the same hex as a deployment zone hex for each player. Also recall that supply points and the hexes around them act as deployment zones.

Build Army



Brings up the Requisitions screen, from which you can determine the makeup of a player's army. You can select forces for each of the player's countries. The country for which you are currently selecting forces is displayed in the upper left corner. Click on the **arrow** button below the flag to move to a player's next country. For more information on the Requisitions screen, see the "Requisitions Screen" section, starting on page 29. **Note:** *There is no limit on the amount of prestige you can spend constructing a player's army, however, there is a forces limit of seventy-two units per side.*

Unit Settings



Brings up the Unit Settings screen. This screen lets you determine units' experience level and strength for the selected player's army.

The units you previously requisitioned are listed on this screen by equipment type. Next to each unit is an experience indicator and strength indicator. These set the unit's experience and strength at the start of the scenario. Click on the arrows next to each unit's indicators to adjust them individually. You can also set all units to the same experience or strength settings simultaneously, using the Make Global Settings counter. Adjustments made to these settings affect all units in that player's army.

At the bottom of the screen is the Reinforcements Experience Level setting. This number applies to all reinforcements that country requisitions or receives during the scenario.

When you finish setting the units' experience and strength, click on the **check mark** button to return to the Scenario Builder screen.



Strategic Map



Replaces the Battlefield map with the Strategic map. Click on the button again to bring back the Battlefield map, or click on an area of the Strategic map to bring up the Battlefield, centered on the selected area.

Deploy Army



Brings up the Deployment panel, allowing you to set requisitioned units in their starting positions in the scenario. You must however, define deployment hexes before any units can be placed on the Battlefield. If you wish to allow the player to deploy their own forces at the start of the scenario, simply don't deploy some or all of the requisitioned troops.

Set Prestige



Brings you to the Set Player Prestige screen. In this screen, you can set the amount of prestige that is allocated per turn. Click on the arrows next to a turn indicator to adjust the prestige for that turn. If you wish to allocate the same amount of prestige each turn, click on the arrows above and below the Set Global Prestige indicator, to fix the amount. When you finish setting the prestige, click on the **check mark** button to return to the Scenario Builder screen.

Note: *The amount of prestige set for Turn 1 is the amount of prestige the player starts with.*

Set Scenario



Brings up the Scenario Parameters screen.

Game Functions



Brings up the Game Functions panel, from which you can save your scenario or start a new game, to test your creation out!

UNIT STATISTICS DESCRIPTIONS

These statistics appear throughout PANZER GENERAL II.

Air Attack



A value gauging the unit's attack capabilities against air targets, such as tactical bombers and fighters. A value of zero indicates that the unit cannot attack air targets.

Air Defense



A value gauging the unit's ability to withstand attacks by air units. Air units use this defense value against all attacks

Ammo



Depending on the screen, this can be either the unit's current ammo supply, or their maximum ammunition. If the unit's ammunition runs out, it cannot attack the enemy until it is resupplied.

Class

The general class to which the unit belongs. The unit classes are aircraft carrier, air defense, anti-tank, artillery, capital ship, destroyer, fighter fortification, infantry, recon, tank, tactical bomber, and transport.

Close Defense



A value gauging a non-infantry ground unit's ability to attack infantry in city or forest hexes, or defend itself in city or forest hexes against infantry. When any non-infantry ground unit attacks infantry which puts up a rugged defense, the attacking unit uses its close defense value. When combating or defending against infantry in city or forest hexes, non-infantry ground units suffer the handicap of using their close defense values. Infantry do not retain this advantage in clear terrain. Since close defense values are usually less than ground defense values, this makes infantry more dangerous in difficult terrain.

Cost



The estimated prestige point cost of requisitioning a new unit.



Current Strength



The unit's current strength points. A unit's maximum normal strength is either five or ten, although this can be modified using 'over strength'. If a unit's strength is reduced to zero, the unit is destroyed.

Entrenchment



The unit's current total entrenchment level. Entrenchment represents the fact that ground units, given enough time, can create defensive structures that better prepare them to withstand attack.

Equipment Type

The specific type of unit of a particular class.

Experience Level



The number of experience bars, between zero and five, that a unit has earned. Experience greatly increases unit's effectiveness.

Fuel



Depending on the screen, this can be either the unit's current fuel supply, or the maximum amount of fuel a unit can carry, which equates to movement points. When this runs out, the unit must resupply before it can move further.

Ground Defense



A value gauging the unit's ability to withstand attacks by land and naval units.

Hard Attack



A value gauging the unit's attack capabilities against hard targets, such as tanks and fortifications. A value of zero indicates that the unit cannot attack hard targets.

► Initiative



A value estimating the unit's ability to react quickly in battle, used to determine combat results. In combat, the unit with the greater initiative has an advantage. Experience and the terrain of the defending unit modify initiative values.

Movement



The number of movement points (fuel) this unit can expend each turn. The expenditure of movement points per hex depends on the terrain type of the hex. See the "Movement" section on page 46 for more information.

Movement Method

The different methods of movement units may use are: leg (L), towed (TO), wheeled (W), half-tracked (HT), tracked (T), all-terrain (AT), naval (N), and air (A). Units with leg or towed movement have no fuel rating, and can acquire non-organic transport for greater mobility.

Naval Attack



A value gauging the unit's attack capabilities against naval targets, such as destroyers and battleships. A value of zero indicates that the unit cannot attack naval targets.

Range



The distance, in hexes, from which a unit can fire on the enemy. A range of zero indicates that the unit must be adjacent to the enemy in order to attack.

► Ranged Defense Modifier



A value gauging the unit's ability to withstand ranged attacks by ground units. This value is not used to defend against artillery fire.

Soft Attack



A value gauging the unit's attack capabilities against soft targets, such as infantry and artillery. A value of zero indicates that the unit cannot attack soft targets.

Spotting Range



The distance, in hexes, at which a unit becomes aware of the general location of enemy units. Note that there are no terrain restrictions on spotting range; for example, a mountain hex does not block spotting beyond it, however, spotting range may be reduced by inclement weather.

Target Type

The target classification of the unit, either S, soft, H, hard, A, air, or N, naval, which determines which attack values an opponent uses against the unit.

Transport



If a unit has organic transport, statistics for the unit's values while mounted are displayed below the unit's normal statistics. When a unit has mounted or embarked in a transport, that unit uses the attack and defensive ratings of the transport. In general, units are vulnerable when in transport. A unit with transport may not embark on air transport.



UNIT CLASS DESCRIPTIONS

By the end of World War II, most of the major combatants had come to realize the importance of the 'combined arms' principle. Every type of unit had a job and would be needed at one time or another during a battle. In *PANZER GENERAL II*, there is no perfect mix of units. What works best depends upon the tactics and strategy that you choose. However, if you are ever in doubt as to how to build your army, it is difficult to go wrong by adhering to the combined arms principle. Successful combined arms use in *PANZER GENERAL II* involves using "the right tool for the task." Probe a position with a Reconnaissance unit to get an idea of what you are facing, and where the enemy is deployed. Use Artillery and Tactical Bombers to soften up the position before it is assaulted, and keep a reserve to exploit a breakthrough, or hold on to a hard won position in the face of an enemy counterattack. The following Unit Class descriptions should help you become a competent Panzer General.

Ground Classes

Air Defense Class (AD)

Air defense class units represent both towed and self-propelled air defense units. In *PANZER GENERAL II*, they are armed with weapons that vary in size from 12.7mm (.50 caliber) to 90mm. They can attack enemy aircraft at ranges of zero to three hexes. In general, they are good at damaging enemy Fighter (FTR) and Tactical Bomber (TB) class units but are very vulnerable to any type of attack. They fire at any enemy TB unit that attempts to attack one of your units, if it is adjacent to or within range of the AD unit in question. This makes them very useful in screening units vulnerable to air attack. These units are important if you need to deny the enemy the advantages of air superiority, but do not have the air units required to beat him in the skies in air to air combat. They are also very valuable when neither side has air superiority, and you do not have enough FTR class units to cover all the units you command and still conduct offensive air operations. Since fighters are very expensive, modestly priced AD units serve as a valuable resource. It is very expensive to maintain an 'Air Force' in *PANZER GENERAL II*, especially one that is not used correctly. The enemy's FTR and TB units cannot 'trade punches' with, nor operate in the area of, a well placed net of AD units for very long. Attempting to do so is very costly, and your AD units are much less expensive to replace. Self-propelled AD units are far more flexible than towed AD units. They can move, and be ready for action immediately after moving, while towed units must wait until your next turn to dismount from their transport and fire/defend against enemy air attack. Self-propelled AD units are ideal for supporting an attack, since they can move with your attacking ground units and be constantly ready for action. This allows units involved in the breakthrough to keep attacking deeper into enemy territory, and to do so with greater speed while being protected from enemy TB units — all of which will aid you in victory.

Anti-tank Class (AT).

Anti-tank class units represent towed anti-tank units and both turreted and non-turreted self-propelled anti-tank units. They are armed with guns ranging in size from 25mm to 152mm. Towed units are unarmored (they are treated as 'soft targets') while some self-propelled units have better armor protection than Tank (TK) class units of the same period. The main difference between TK and AT units in *PANZER GENERAL II* is one of game mechanics. Anti-tank units were meant to counter enemy tank activity/operations. To represent their use



in such a fashion, AT class units suffer a penalty to initiative and attack value if they move, and attack in the same turn. If they attack before they have moved they suffer no penalty. Why purchase AT units over TK units? The towed AT units are better at defending against TK units than other TK units until relatively late in the war. By that time, some of the most powerful guns in PANZER GENERAL II are carried by AT units. As a general rule, the larger caliber, more powerful guns are available as armament for AT class units several months before they are available to TK units. AT units are also generally less expensive than TK units armed with a similar gun. They are valuable when deployed to defend against an enemy's attacking TK units, freeing up your TK units to counterattack. They also are very effective when used to support an attack while it is trying to break through enemy lines. Several heavy AT units can damage defending units, firing from relative safety at a range of two hexes. This lets your TK units remain unengaged until you have broken through the enemy's main line of defense, at which point your TK units can rush into the enemy's rear areas, overrunning vulnerable AD and Artillery units. Though AT units are not as flexible as TK units on the attack, they more than make up for this with their heavier guns, better defensive capability, and lower cost.



Artillery Class (ATY)

Artillery class units represent towed and self-propelled howitzer guns which are equipped and organized to provide support for the other combat arms. They are armed with guns ranging in size from 75mm to 200mm or more. They are all able to attack units from at least two hexes away, and some ATY units can attack units five hexes away. ATY units also have two special abilities that make them very powerful in PANZER GENERAL II. The first is called **Close Support Fire**. This ability allows ATY units to fire at any enemy ground unit attacking any friendly ground unit that is adjacent to the ATY unit in question. This means that attacking units can be hit by suppression and kill results before they attack the targeted unit. The second special ability is called **Support Fire**. This allows an ATY unit to fire at any enemy ground unit conducting an attack within range of the ATY unit in question. As with Close Support Fire, this attack takes place before the enemy ground unit conducts its attack. Self-propelled ATY units are some of the most powerful units in PANZER GENERAL II. They are usually armored, which gives them a large advantage in an artillery duel with towed ATY units. They can also move with units that have broken through enemy lines and immediately provide fire against a counterattacking enemy. Self-propelled ATY units are expensive, but well worth their high cost if used correctly. You almost always need some type of artillery support to launch a successful attack, and ATY units are very effective in a defensive role as well.

Fortifications Class (FRT)

The fortifications class is divided into two types: “fortifications,” which are networks of immovable, strongly-built heavy artillery and infantry positions, and “strongpoints,” which are lighter networks of pillboxes and light field fortifications. Since fortifications have ample reserves of ammo and strong attack values, they should shoot aggressively at any enemy that approaches. A combination of artillery and aerial bombardment followed by an assault by engineer or pioniere units is the proven method of capturing enemy forts and strongpoints that cannot be bypassed.

Infantry Class (INF)

Infantry class units represent infantry units, armed with infantry weapons (rifles, submachine guns, etc.), heavy weapons (machine guns, 50mm to 120mm mortars, light AT weapons, etc.), a small number of supporting AT guns, and in some cases special assault weapons (demolition charges, etc.) and even bridging equipment. There are many types of units in PANZER GENERAL II that can perform certain tasks better than infantry units, but none of them can replace infantry units in their primary job - capturing and holding ground. You need INF units to hold urban, forested, and rough terrain areas against enemy infantry, and you also usually need INF units to capture urban, forested, and rough terrain areas from the enemy. INF units are very inexpensive to maintain compared to other types of units, and experienced INF units win battles for you where other types of units cannot. However, INF units must be used with some thought or they are quickly destroyed or worn down to the point that they cannot accomplish anything. Avoid having your INF units fight unsupported against TK and ATY units on open ground. Even on open ground, they can defend against nearly any type of unit if supported by good ATY and AT units and protected from air attack by AD units if need be.

► Recon Class (RCN)

Recon class units represent light mechanized units whose primary task is to scout the battlefield, infiltrate enemy lines, and harass enemy lines of supply and the enemy's rear areas. They are equipped with armored cars, and usually have small infantry units in half-tracks or trucks in their formations as well. They all have a very good spotting range, and may break up their movement into segments. If properly taken advantage of, this **phased movement** allows RCN units to expose enemy positions before launching an attack. RCN units were expected to avoid heavy fighting. Their job was to exploit breakthroughs and scout ahead of attacking forces. To represent this in PANZER GENERAL II, RCN units usually retreat from combat with a superior enemy, trading ground for losses.



► Tank Class (TK)

Tank class units are the armored fist of your combat forces, and proper use of TK units is of paramount importance in PANZER GENERAL II. They represent light, medium, and heavy armored tank units with groups of mechanized or motorized infantry attached to support them. They are armed with guns ranging from 15mm (designed during the 1930s) to 122mm (carried by Soviet tanks in 1944 and 1945), and are some of the most powerful units in PANZER GENERAL II on both attack and defense, especially by 1942. TK units have a special ability called **Overrun**. This ability allows TK units to ‘roll over’ weak defending units without conducting an attack. They can overrun a weak defender, continue to



move into contact with another enemy unit, and then conduct a standard attack. As powerful as they are, TK units should avoid fighting INF or AT units in urban, forested, or rough areas (that's what your INF units are for) and should also avoid attacking AT units that have a high entrenchment level in any type of terrain. If used properly, TK units are devastating on attack or defense. However, they can be expensive, so use some thought as to where and when you commit them to battle.

Transport Class (TPT)

Transport units represent heavy wagons with draught horses, heavy duty trucks, tracked and half-tracked vehicles. Since towed weapons cannot move without transport, and Infantry are rarely quick enough to reach objectives in a timely manner, the choice is not whether to requisition TPT units, but what *type* of TPT to requisition. Wagons are much less expensive than trucks, and trucks are much less expensive than half-tracks. Trucks are satisfactory, as long as they

keep to the road; their cross country mobility is poor. With a few exceptions, wagons are only used when nothing else is available or your prestige is severely limited. Half-tracks have a number of advantages over wagons and trucks. They are hard targets, and have better defense values. They also possess much better mobility over open terrain. This allows infantry, towed anti-tank, air defense, and artillery units to keep up with your tank and recon units in the attack - a critical issue. Although INF units dismount from their transport (unless subject to tactical surprise) when attacked by ground units, in all other situations a unit that is attacked by the enemy while mounted is usually decimated. Be especially wary of enemy tactical bombers when transporting units.

Air Classes

Air Transport (ATP)

Most scenarios include a pool of air transport points. Air transport is non-organic transport which allows infantry, light artillery, and light anti-tank units to embark at friendly airfields and disembark at any unoccupied airfield (enemy airfields may be seized in this way). Paratroopers, commandos, and rangers can "jump" in any non-city hex. See the "Embarking and Disembarking Air and Naval Units" section on page 47 for information about transporting units by air. Note that air transports are highly vulnerable to both enemy fighters and air defense units and require fighter escorts, particularly for paratroops behind enemy lines.

Fighter Class (FTR)

Fighter class units represent air superiority combat aircraft whose primary task is to destroy enemy aircraft or prevent enemy aircraft from carrying out their mission. They are expensive, and not very effective at attacking enemy ground units, (although they can damage ATY units and other ground units with low air defense values) but necessary to win the battle for air superiority in a given scenario. They act as escorts for friendly TB units, attacking any enemy FTR unit who attacks a friendly TB unit adjacent to the friendly FTR unit in question. This escort attack comes before the enemy FTR unit can attack the friendly TB unit, but FTR units only attack as escorts once per turn. They also attack enemy TB units attacking a friendly ground unit that is adjacent to the friendly FTR unit in question. Again, this attack takes place before the enemy TB unit gets a chance to attack your ground unit, and the FTR unit can only conduct such an attack once per turn. A good way of looking at FTR units and air superiority is this - they cannot win a battle for you, but it is hard to win one without FTR units and the air superiority they give you when they are victorious. They are good at destroying enemy FTR and TB units, and



protecting your TB units from enemy FTR units, as well as protecting your ground units from attack by enemy TB units. However, they are expensive, so use them wisely.

Tactical Bomber Class (TB)

Tactical bomber class units represent light bombers, medium bombers, fighter bombers, dive bombers, and specialized ground attack aircraft whose primary task is to destroy enemy ground units from the air. They are usually armed with machine guns (.303 caliber to .50 caliber) and cannon (anywhere from 15mm to 75mm), bombs, and occasionally air to ground rockets. They function as artillery that can be anywhere on the battlefield. This allows them to attack units far behind the front line, which would normally be safe from any other type of unit. In the early years of the war they are often the only units that can affect the heavier TK units, as well. As the war progresses, TB units that specialize in killing enemy tanks become available. These units have very high hard attack values. Most TB class units are a great asset in both attack and defense. TB units are even more expensive than FTR units, and are a favored target for enemy FTR and AD units. Used correctly and covered by friendly FTR units, they can have a dramatic effect on the outcome of a battle.



Naval Classes

Aircraft Carrier (CV)

The aircraft carrier class acts as a mobile airfield for fighters and tactical bombers. Carriers have excellent spotting ranges but are vulnerable to naval attacks, and their high cost makes them very attractive targets in terms of prestige.

Capital Ship (CS)

The capital ship class includes battleships, battle-cruisers, heavy cruisers, and light cruisers. Capital ships have the ability to make ranged attacks and may move and shoot in either order. They are best used to defeat the enemy fleet, but after a naval victory can support the ground forces with off-shore bombardment, especially against soft targets. Capital ships shot at by other capital ships are entitled to shoot back with a ranged attack with any surviving, unsuppressed strength points. All capital ships repair extremely slowly, so they are not able to take replacements.



Destroyer (DD)

The destroyer class consists of destroyers, destroyer escorts, patrol craft, and torpedo boats. Destroyer class units are less expensive than capital ships, and faster. They make effective scout ships, with greater spotting ranges, for hunting down enemy transports and locating capital ships, for attack by your own capital ships and tactical bombers. Destroyers are vulnerable to heavy fire, however, and are easily destroyed by capital ships. Use screens of destroyer class vessels to protect heavier ships from enemy ships until your capital ships can bring their weapons to bear.

Naval Transport (NTP)

Naval transport is extremely important in amphibious invasion scenarios. Naval transport is non-organic transport which allows ground units to embark at friendly port facilities, and disembark in any unoccupied coastal hex. See the "Embarking and Disembarking Air and Naval Units" section on page 47 for more information. Note that naval transports should be protected by naval and air units because they are highly vulnerable to enemy naval units and, to a lesser extent, to enemy tactical bombers.

UNIT CLASS AND EQUIPMENT TYPE SPECIAL ABILITIES

► Infantry Class: Engineer Abilities

There are two kinds of engineers: engineers and bridging engineers. Engineers ignore any rugged defense that occurs from attacking enemies with high entrenchment values, and can destroy bridges. When an engineer unit is adjacent to an unoccupied bridge hex, right-clicking on the bridge destroys the bridge. This counts as an attack. Bridging engineers' only ability is to act as bridges when in river hexes. Units that are classified as engineers include: Pionieres and Engineers.

► Recon Class: Phased Movement

Every unit in the Recon Class has the special ability of moving more than once in a turn, called phased movement. For example, you may move a recon unit several hexes, but so long as the unit has more than one point of movement remaining, you may be able to move it again. Later that turn, you reselect the unit; one point of movement is deducted as a penalty for moving again, and the unit's remaining movement points are used to determine if it can move again. This can be repeated until the unit has no movement left; so in theory, a Recon unit with six movement points in clear terrain can be moved three times in one turn, provided it moved into one clear hex each time.

► Tactical Bomber Class: Continued Suppression

All points of suppression that a tactical bomber inflicts on another unit in a turn lasts for the attacking player's entire turn. In other words, if your tactical bomber attacks an infantry unit and inflicts three points of suppression, for the rest of your turn, in every combat that the infantry unit is involved in, it effectively has three fewer strength points to attack with.

► Tank Class: Overrun

Tank class units possess a special ability called **Overrun**; a powerful advantage usable under certain conditions. A tank unit that conducts a devastating attack on a weakened foe has the possibility of 'rolling over' its opponent. If the tank's attack eliminates the defender, an Overrun Attack message may appear in the Information bar at the top of the Main Game screen. If this message occurs, the tank is allowed to continue with its movement, and attack again. This represents a tank unit's ability to smash straight through weakened units. With luck, and a line of weak defenders, a tank may attack and destroy two or three lesser units in a single turn.

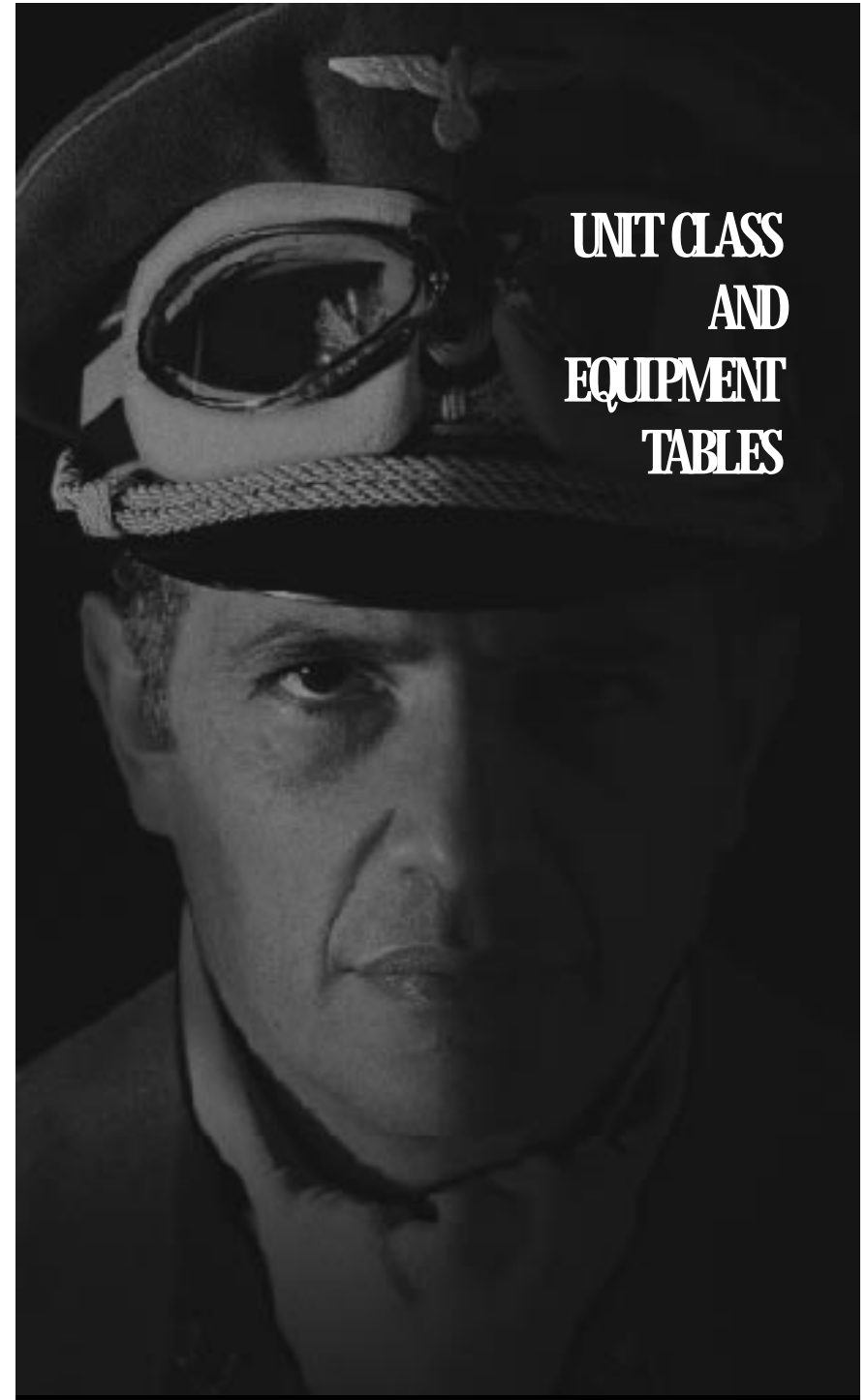


Air Mobile and Airborne Units

Air mobile units may be transported via air transports from one airfield to another. To determine how much air transport you have available, run the mouse cursor over any airfield hex. A number appears on the upper information bar, indicating how many air mobile units can be transported at this time. If no number appears, you have no air transport.

To be transported, the unit has to start in an airfield hex. Click on the Embark button, from the View Unit panel, to load it into an air transport. The unit moves with the air transport, until that unit wants to return to the ground, at which point the air transport must begin its turn in an airfield hex. From there, the unit can disembark (again using the View Unit panel button). Air Mobile units consist of infantry, light anti-tank, and light artillery, and are marked with an AM in the Air Transport column of the "Unit Class and Equipment" tables, beginning on page 100.

Airborne units, marked AB in the Unit Class and Equipment tables, are units that do not need an airfield to disembark from their air transport. These units load into air transports normally, but to disembark, simply select the air transport selected before it has moved in a turn, and click on the airborne unit's Embark - Disembark button. That unit is then placed in the same hex as where the air transport was, or in one of its six adjacent hexes; this represents the possibility of wind gusts blowing the unit off course. Units that are airborne capable include paratroopers, commandos, rangers, and Fallschirmjager units.



UNIT CLASS AND EQUIPMENT TABLES

Unit Class and Equipment Tables Statistics Descriptions

The abbreviations used in the Unit Class and Equipment tables are explained here. For definitions of most of these terms, see the "Unit Statistics Descriptions" section, starting on page 83.

Country: *The country which produces that unit. You may be able to requisition units made by countries other than your own.*

Equip. Type: Unit Equipment Type

Class: Unit Class

Date Av.: *Date Available, the month and year when a unit began being produced. During campaign play, you may receive a prototype of a unit prior to this date for exceptional performance.*

Year Ex.: *Year of Expiration, the year when a unit is no longer produced. Units may remain operational past their expiration, but no further units of the same type may be requisitioned.*

Cost: *Base prestige cost of the unit, without transport.*

MO: Movement

SR: Spotting range

FU: Maximum Fuel

AM: Full Ammunition

IN: Initiative

RA: Range

SA: Soft Attack

HA: Hard Attack

AA: Air Attack

NA: Naval Attack

GD: Ground Defense

AD: Air Defense

CD: Close Defense

TT: Target Type

S = Soft

H = Hard

A = Air

N = Naval

RM: Ranged Modifier

MM: Movement Method

L = Leg

TO = Towed

W = Wheeled

HT = Half-Track

T = Tracked

AT = All-Terrain

N = Naval

A = Air

TR: Non-Organic

Transport Capability

— = Cannot Be

Transported

NT = Naval

Transport Only

AM = Airmobile

AB = Airborne

Unit Class

Abbreviations

AD: Air Defense

AT: Anti-tank

ATP: Air Transport

ATY: Artillery

CS: Capital Ship

CV: Aircraft Carrier

DD: Destroyer

FRT: Fortification

FTR: Fighter

INF: Infantry

NTP: Naval Transport

RCN: Recon

TB: Tactical Bomber

TK: Tank

TPT: Transport

Unit Class and Equipment Tables By Country

CZECHOSLOVAKIA

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
20mm Flak TU.C.	AD	1/38	46	96	0	2	0	12	5	2	3	2	7	1	2	6	0	S	9	TO	NT
40mm	AD	11/39	46	192	0	2	0	10	4	2	9	12	10	1	2	6	0	S	8	TO	NT
3.7cm PaK	AT	4/37	46	132	0	2	0	10	6	1	4	7	0	1	8	8	0	S	9	TO	NT
47mm	AT	1/38	46	144	0	2	0	9	7	1	4	8	0	1	8	8	0	S	9	TO	NT
105mm	ATY	1/38	46	228	0	1	0	8	2	4	15	7	0	1	2	6	0	S	2	TO	NT
150mm	ATY	1/38	46	324	0	1	0	7	2	4	19	11	0	1	2	6	0	S	2	TO	NT
75mm	ATY	1/38	46	180	0	1	0	9	2	3	11	4	0	1	2	6	0	S	2	TO	NT
Fortification	FRT	1/38	46	204	0	2	0	10	5	1	9	5	2	4	10	8	3	H	8	TO	-
Strongpoint	FRT	1/38	46	180	0	2	0	10	5	1	5	3	2	2	10	8	3	H	8	TO	-
Avia B.534	FTR	6/37	40	456	10	2	-	7	4	1	2	1	12	1	8	10	0	A	1	A	-
Engineer	INF	1/38	46	228	3	2	0	7	2	1	8	5	1	1	8	8	0	S	8	L	AM
Regular	INF	1/38	46	132	3	2	0	7	2	1	6	2	0	1	6	7	0	S	8	L	AM
LTM 35	TK	1/35	46	156	5	2	50	8	3	1	5	6	0	1	8	8	2	H	5	T	NT
TNHP-S	TK	1/38	46	168	5	2	50	9	6	1	5	7	0	1	9	8	2	H	5	T	NT
Truck	TPT	9/36	46	48	8	1	55	4	1	1	0	0	0	0	1	0	0	S	1	W	NT
Wagon	TPT	9/36	46	24	4	1	0	0	0	1	0	0	0	0	1	0	0	S	1	W	NT

FINLAND

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
37mm Flak	AD	1/40	46	132	0	2	0	24	4	2	4	7	8	1	2	6	0	S	8	TO	NT
3.7cm PaK	AT	4/37	46	132	0	2	0	10	6	1	4	7	0	1	8	8	0	S	9	TO	NT
5cm PaK	AT	4/41	46	168	0	2	0	9	9	1	7	11	0	1	8	8	0	S	9	TO	NT
7.5cm PaK	AT	3/42	46	216	0	2	0	8	10	2	11	15	0	1	8	8	0	S	9	TO	NT
StuG IIB	AT	5/40	46	252	5	2	41	6	5	2	11	8	0	1	10	8	0	H	5	T	NT
StuG IIIG	AT	9/42	46	276	5	2	40	8	10	2	11	15	1	1	11	9	2	H	5	T	NT
Ju-52	ATP	1/41	46	144	10	2	-	4	0	1	0	0	0	0	5	4	0	A	1	A	-
105mm	ATY	9/39	46	252	0	1	0	8	2	4	15	6	0	1	2	6	0	S	2	TO	NT
150mm	ATY	4/40	46	324	0	1	0	7	2	4	19	11	0	1	2	6	0	S	2	TO	NT
75mm	ATY	9/38	46	180	0	1	0	9	2	3	11	4	0	1	2	6	0	S	2	TO	NT
Fortification	FRT	1/38	46	204	0	2	0	10	5	1	8	4	2	4	10	8	3	H	8	TO	-
Strongpoint	FRT	1/38	46	180	0	2	0	10	5	1	4	2	2	2	10	8	3	H	8	TO	-
Me-109f	FTR	1/41	46	480	14	2	-	7	6	1	2	2	12	1	8	12	0	A	1	A	-
F-2A	FTR	1/39	46	276	10	2	-	7	4	1	3	1	6	0	5	5	0	A	1	A	-
Fokker DXXI	FTR	1/39	46	336	10	2	-	4	5	1	2	1	8	0	7	6	0	A	1	A	-
Regular	INF	1/39	46	144	3	2	0	7	1	1	6	2	0	1	8	8	0	S	8	L	AM
Sissi	INF	1/39	46	180	3	3	0	7	1	1	6	4	0	1	8	8	0	S	8	L	AM
Ski	INF	10/39	42	140	5	2	0	7	1	1	6	2	0	1	8	8	0	S	8	L	AM
PSW 231	RCN	1/41	46	192	8	4	81	9	7	1	3	9	2	1	7	6	1	H	6	AT	NT
Ju-87B	TB	1/41	46	432	11	2	-	5	2	1	10	9	4	5	8	4	0	A	1	A	-
Pz IIIJ	TK	4/42	46	288	5	2	41	11	9	1	9	11	0	1	10	9	2	H	4	T	NT
Pz IVD	TK	1/40	46	288	5	2	46	11	5	1	12	8	0	1	8	8	2	H	4	T	NT
Pz IVG	TK	10/42	46	336	5	2	46	11	10	2	12	14	0	1	10	8	2	H	4	T	NT
Truck	TPT	9/36	46	40	8	1	55	4	1	1	0	0	0	0	1	0	0	S	1	W	NT
Wagon	TPT	9/36	46	24	4	1	0	0	0	1	0	0	0	0	1	0	0	S	1	W	NT

FRANCE

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
M16 M GMC	AD	6/44	46	252	7	2	57	6	4	1	7	1	12	0	6	9	0	H	4	HT	NT
25mm	AT	5/35	42	120	0	2	0	5	6	1	2	5	0	1	8	8	0	S	9	TO	NT
76mm	AT	6/44	46	204	0	2	0	7	8	2	11	14	0	1	8	8	0	S	8	TO	NT
M10	AT	6/44	46	300	6	2	57	7	10	2	11	15	1	1	10	6	0	H	4	T	NT
C-47	ATP	1/43	46	192	12	1	-	1	0	1	0	0	0	0	5	8	0	A	1	A	-
105mm	ATY	9/39	42	240	0	1	0	8	1	4	15	6	0	1	2	6	0	S	2	TO	NT
155mm	ATY	9/39	42	312	0	1	0	5	1	4	19	11	0	1	2	6	0	S	2	TO	NT
75mm	ATY	9/39	42	168	0	1	0	9	1	3	11	4	0	1	2	6	0	S	2	TO	NT
M7	ATY	9/43	46	312	5	1	52	7	4	3	15	6	2	0	7	6	0	H	3	T	NT
Dunkerque	CS	4/37	42	456	4	1	-	4	9	6	11	7	9	18	12	8	0	N	1	N	-
Richelieu	CS	6/40	42	432	5	1	-	4	8	6	9	6	8	16	10	9	0	N	1	N	-
Suffren	CS	1/30	42	336	5	1	-	4	7	5	7	4	6	12	8	7	0	N	1	N	-
La Galissonniere	CS	12/35	42	264	5	1	-	4	6	4	4	2	6	8	7	5	0	N	1	N	-
Le Fantasque	DD	11/33	46	180	6	2	-	20	10	3	4	2	4	14	3	4	3	N	1	N	-
Fortification	FRT	1/38	46	204	0	2	0	10	5	1	8	4	2	4	10	8	3	H	8	TO	-
Strongpoint	FRT	1/38	46	180	0	2	0	10	5	1	4	2	2	2	10	8	3	H	8	TO	-
D 520	FTR	2/40	42	468	13	2	-	8	5	1	2	2	12	1	9	10	0	A	1	A	-
MS-406	FTR	9/39	42	396	12	2	-	5	3	1	2	2	8	1	8	10	0	A	1	A	-
Cavalry	INF	1/38	42	132	4	3	0	5	1	1	4	1	0	1	5	7	0	S	6	L	NT
Chasseurs	INF	9/39	46	132	3	2	0	5	1	1	4	1	0	1	6	7	0	S	8	L	AM
Engineer	INF	1/38	46	144	3	2	0	5	1	1	4	1	0	1	5	7	0	S	8	L	AM
Regular	INF	1/38	42	108	3	2	0	5	1	1	4	1	0	1	5	7	0	S	8	L	AM
Regular	INF	11/41	46	108	3	2	0	5	1	1	4	1	0	1	5	7	0	S	8	L	AM
Naval Transport	NTP	1/40	46	168	5	1	-	0	1	1	0	0	0	0	4	8	0	N	2	N	-
M8	RCN	8/43	46	204	8	4	81	9	7	1	3	9	2	1	7	6	1	H	6	W	NT
Panhard 178	RCN	1/38	42	132	6	4	50	5	5	1	3	4	2	1	5	5	1	H	4	W	NT
Pz 633	TB	1/39	42	444	12	2	-	5	4	1	4	3	10	2	9	6	0	A	1	A	-
B1-bis	TK	5/40	42	288	4	2	40	14	7	1	13	8	0	1	11	11	4	H	3	T	NT
H39	TK	5/40	42	156	5	3	40	14	3	1	4	4	0	1	8	7	1	H	5	T	NT

FRANCE, cont.

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
M4A1	TK	6/44	46	264	5	2	45	12	9	1	13	12	2	1	12	9	3	H	3	T	NT
M4A1/76	TK	9/44	46	360	5	2	41	11	10	2	13	15	2	1	12	9	3	H	3	T	NT
M5A1	TK	1/44	46	216	7	3	41	14	7	1	5	9	1	1	10	8	2	H	5	T	NT
R35	TK	1/39	42	120	4	3	41	11	3	1	4	4	0	1	8	7	1	H	5	T	NT
R40	TK	6/40	42	180	4	2	39	11	4	1	4	5	0	1	8	7	1	H	5	T	NT
S35	TK	5/40	42	228	5	2	51	14	7	1	5	8	0	1	10	11	1	H	4	T	NT
MCG-5	TPT	12/42	42	156	8	1	45	10	2	1	3	3	6	1	7	1	1	H	4	HT	NT
Truck	TPT	12/42	46	48	8	1	75	4	0	1	0	0	0	0	1	0	0	S	1	W	NT
Truck	TPT	9/36	41	48	8	1	60	4	1	1	0	0	0	0	2	0	0	S	1	W	NT
Wagon	TPT	9/36	46	24	4	1	0	0	0	1	0	0	0	0	1	0	0	S	1	W	NT

GERMANY

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
20mm Flak	AD	7/38	46	96	0	2	0	12	5	2	3	2	7	1	2	6	0	S	9	TO	NT
20mm (Q) Flak	AD	4/41	46	192	0	2	0	20	4	2	7	4	14	1	2	6	0	S	6	TO	NT
37mm Flak	AD	9/38	46	132	0	2	0	24	4	2	4	7	8	1	2	6	0	S	9	TO	NT
37mm Flak/IV	AD	5/44	46	228	5	2	45	8	6	2	4	7	8	1	9	10	0	H	4	T	NT
88mm Flak	AD	4/37	46	264	0	3	0	10	11	3	13	18	10	2	2	6	0	S	6	TO	NT
Coelion	AD	5/45	46	336	6	2	45	20	8	2	4	7	14	1	10	12	1	H	4	T	NT
FlakPz 38(0)	AD	1/44	46	180	6	2	46	7	6	2	2	3	8	1	6	8	0	H	4	T	NT
Ostwind	AD	10/44	46	252	5	2	45	23	4	2	4	7	9	1	9	11	1	H	3	T	NT
SdKfz 10/4	AD	7/39	46	168	7	2	40	12	5	2	3	2	7	1	4	9	1	H	4	HT	NT
SdKfz 6/2	AD	7/39	46	168	7	2	40	8	5	2	3	2	9	1	4	9	1	H	4	HT	NT
SdKfz 7/1	AD	10/41	46	240	7	2	45	23	4	2	4	7	14	1	4	9	1	H	4	HT	NT
Wirbelwind	AD	9/44	46	276	5	2	45	19	6	2	6	4	14	1	7	11	1	H	3	T	NT
3.7cm PaK	AT	7/36	46	108	0	2	0	24	4	2	4	7	0	1	2	6	0	S	9	TO	NT

GERMANY, cont.

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
5cm PaK	AT	10/40	46	168	0	2	0	9	9	1	7	11	0	1	8	8	0	S	9	TO	NT
7.5cm PaK	AT	11/41	46	216	0	2	0	8	10	2	11	15	0	1	8	8	0	S	9	TO	NT
8.8cm Flak	AT	9/37	46	240	0	2	0	10	11	2	13	18	1	2	6	8	0	S	7	TO	NT
8.8cm PaK	AT	6/44	46	276	0	2	0	8	12	2	13	23	0	2	8	8	0	S	8	TO	NT
Elefant	AT	7/43	46	468	3	2	24	7	12	2	13	23	0	1	18	10	1	H	2	T	NT
Heizer	AT	6/44	46	276	5	2	43	8	10	2	6	15	0	1	14	8	1	H	5	T	NT
JagdI Tiger	AT	12/44	46	528	4	2	28	8	12	2	9	28	0	1	20	12	4	H	2	T	NT
JgdPanther	AT	4/44	46	420	6	2	37	8	12	2	7	23	0	1	18	11	4	H	4	T	NT
JgdPz IV	AT	2/44	46	276	5	2	46	9	10	2	8	15	0	1	13	9	3	H	5	T	NT
JgdPz IV/70	AT	8/44	46	336	4	2	46	7	11	2	6	20	0	1	15	9	3	H	5	T	NT
Marder III	AT	4/42	46	240	5	2	49	6	10	2	6	15	0	1	7	6	0	H	4	T	NT
Nashorn	AT	6/43	46	312	5	2	47	5	12	2	6	23	0	1	6	6	0	H	3	T	NT
PzJgd I	AT	2/40	46	156	6	2	39	9	8	1	3	9	0	1	6	6	0	H	5	T	NT
StuG IIB	AT	5/40	46	228	5	1	41	6	5	2	11	8	0	1	10	8	0	H	5	T	NT
StuG IIF	AT	4/42	46	252	5	2	39	7	10	2	11	14	1	1	10	8	1	H	5	T	NT
StuG IIIG	AT	5/43	46	288	5	2	40	8	10	2	12	15	1	1	11	9	4	H	5	T	NT
StuH 42	AT	10/42	46	264	5	1	40	7	5	2	15	8	1	1	11	9	4	H	3	T	NT
Ju-52	ATP	1/38	46	144	10	1	-	4	0	1	0	0	0	0	5	4	0	A	1	A	-
10.5 leFH 18	ATY	1/38	46	240	0	1	0	8	2	4	15	6	0	1	2	6	0	S	2	TO	NT
15 NBW/41	ATY	1/39	46	312	0	1	0	4	5	3	19	11	0	1	7	6	0	S	2	TO	NT
15 sFH 18	ATY	1/38	46	312	0	1	0	7	2	4	19	11	0	1	2	6	0	S	2	TO	NT
17 K18	ATY	1/42	46	384	0	1	0	6	2	5	21	13	0	2	2	6	0	S	2	TO	NT
7.5 leFH 16nA	ATY	1/38	46	168	0	1	0	9	2	3	11	4	0	1	2	6	0	S	2	TO	NT
Hummel	ATY	7/43	46	372	5	1	47	4	5	3	19	11	0	1	7	6	0	H	3	T	NT
sIG 38(0)M	ATY	3/43	46	396	4	1	38	5	4	3	19	11	1	1	13	6	0	H	3	T	NT
sIG IB	ATY	5/40	46	372	5	1	35	4	4	3	19	11	0	1	5	6	0	H	3	T	NT
sIG II	ATY	1/42	46	384	5	1	41	3	4	3	19	11	0	1	8	6	0	H	3	T	NT
Wespe	ATY	7/43	46	288	5	1	39	6	5	3	15	6	1	1	6	6	0	H	3	T	NT

GERMANY, cont.

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
Wurfrahmen	ATY	3/43	46	396	6	1	55	3	0	3	22	11	1	1	7	3	1	H	3	HT	NT
Bismarck	CS	1/41	46	504	4	1	-	20	13	6	9	6	6	19	10	8	0	N	1	N	-
Scharnhorst	CS	1/39	46	432	5	1	-	20	11	6	10	6	8	17	9	9	0	N	1	N	-
Hipper	CS	4/39	46	312	5	1	-	20	9	5	6	3	5	12	7	7	0	N	1	N	-
Nürnberg	CS	1/36	46	240	5	1	-	20	8	4	4	2	4	10	5	5	0	N	1	N	-
Zeppelin	CV	1/43	46	528	5	1	-	20	8	1	1	1	5	2	5	5	0	N	1	N	-
Maass	DD	1/43	46	156	5	2	-	20	11	3	3	1	3	13	3	3	3	N	1	N	-
Fortification	FRT	1/38	46	204	0	2	0	10	5	1	8	4	2	4	10	8	3	H	8	TO	-
Strongpoint	FRT	1/38	46	180	0	2	0	10	5	1	4	2	2	2	10	8	3	H	8	TO	-
Bf-109b	FTR	6/37	40	492	13	2	-	7	5	1	2	2	14	1	8	10	0	A	1	A	-
Me-109e	FTR	1/39	46	504	13	2	-	7	5	1	3	2	14	1	8	10	0	A	1	A	-
Me-109g	FTR	5/42	46	516	14	2	-	8	5	1	3	2	14	1	8	12	0	A	1	A	-
Me-109k	FTR	1/43	46	588	14	2	-	6	6	1	3	3	16	1	9	14	0	A	1	A	-
Me-110c	FTR	1/39	46	396	13	2	-	8	4	1	3	2	8	1	9	8	0	A	1	A	-
Do-335	FTR	4/45	46	780	14	2	-	8	7	1	3	2	25	1	9	17	0	A	1	A	-
FW-190a	FTR	7/41	46	600	14	2	-	8	6	1	3	3	17	1	9	14	0	A	1	A	-
FW-190d	FTR	1/44	46	636	14	2	-	8	6	1	3	3	19	1	9	14	0	A	1	A	-
He-162	FTR	4/45	46	816	14	2	-	6	8	1	3	3	27	2	9	16	0	A	1	A	-
Me-163	FTR	8/44	46	660	14	2	-	4	8	1	1	3	22	2	12	8	0	A	1	A	-
Me-262	FTR	10/44	46	792	14	2	-	6	7	1	3	3	25	2	10	17	0	A	1	A	-
Bridge Engineer	INF	1/38	46	144	3	2	0	7	2	1	6	2	0	1	6	7	0	S	8	L	AM
Cavalry	INF	1/38	46	156	5	3	0	7	1	1	6	2	0	1	6	7	0	S	6	L	NT
Fallschirmjäger	INF	6/38	46	192	3	2	0	8	2	1	8	5	0	1	8	7	0	S	8	L	AB
Garrison	INF	1/38	46	96	2	2	0	5	0	1	4	2	0	1	5	6	0	S	6	L	NT
Jaeger	INF	6/38	46	180	3	2	0	7	2	1	8	3	1	1	8	8	0	S	8	L	AM
Pioniere	INF	6/38	46	228	3	2	0	7	2	1	8	6	1	1	8	8	0	S	8	L	AM
Regular	INF	1/38	46	132	3	2	0	7	2	1	6	2	0	1	6	7	0	S	8	L	AM

GERMANY, cont.

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
Stosstruppen	INF	6/38	46	180	3	2	0	7	2	1	8	6	1	1	8	8	0	S	8	L	AM
Volkssturm	INF	6/44	46	108	3	2	0	5	1	1	4	4	0	1	5	6	0	S	8	L	NT
Naval Transport	NTP	1/40	46	168	5	1	-	0	1	1	0	0	0	0	4	8	0	N	2	N	-
250/1	RCN	9/41	46	132	7	4	45	6	2	1	2	1	1	0	8	0	1	H	3	HT	NT
PSW 222	RCN	1/36	46	156	6	4	55	8	6	1	2	3	2	1	7	6	1	H	6	W	NT
PSW 231	RCN	1/38	46	168	8	4	55	8	6	1	2	3	2	1	8	6	1	H	6	AT	NT
PSW 233	RCN	6/43	46	264	8	4	55	3	5	2	11	12	0	1	8	6	0	H	6	AT	NT
PSW 234/1	RCN	7/44	46	180	8	4	115	16	6	1	2	3	2	1	9	5	1	H	6	AT	NT
PSW 234/2	RCN	10/43	46	276	8	4	115	10	9	1	7	11	0	1	9	7	2	H	6	AT	NT
PSW 234/3	RCN	12/44	46	276	8	4	115	10	9	1	11	8	0	1	9	7	2	H	6	AT	NT
PSW 234/4	RCN	12/44	46	324	8	4	115	5	9	1	11	14	0	1	9	7	2	H	6	AT	NT
Me-110e	TB	1/41	46	444	13	2	-	6	4	1	6	6	8	2	10	8	0	A	1	A	-
FW-190f	TB	12/42	46	612	14	2	-	7	6	1	6	6	16	2	9	14	0	A	1	A	-
FW-190g	TB	6/43	46	696	14	2	-	7	6	1	8	8	18	3	10	15	0	A	1	A	-
HS-129	TB	1/44	46	552	12	2	-	7	2	1	8	14	7	7	12	6	0	A	1	A	-
Ju-87B	TB	9/38	46	432	11	2	-	5	2	1	10	9	4	5	8	4	0	A	1	A	-
Ju-87D	TB	2/41	46	504	12	2	-	7	2	1	12	11	6	7	9	5	0	A	1	A	-
Ju-87G	TB	3/42	46	492	12	2	-	7	2	1	8	13	6	7	9	5	0	A	1	A	-
King Tiger	TK	6/44	46	528	4	2	29	11	12	2	15	23	1	1	20	12	4	H	2	T	NT
Maus	TK	2/45	46	648	3	2	48	11	12	2	20	25	0	4	25	10	5	H	1	T	NT
Panther A	TK	9/43	46	396	6	2	34	11	11	2	13	20	0	1	16	9	4	H	3	T	NT
Panther D	TK	7/43	46	408	6	2	28	10	10	2	12	20	0	1	15	9	4	H	3	T	NT
Panther G	TK	2/44	46	408	6	2	40	11	11	2	13	20	1	1	17	10	4	H	3	T	NT
Panther IIF	TK	6/45	46	552	5	2	28	14	13	2	15	24	1	1	18	11	5	H	3	T	NT
Pz 35(t)	TK	1/39	46	168	5	2	50	8	3	1	5	6	0	1	8	8	2	H	5	T	NT
Pz 38(t)A	TK	5/39	46	180	5	2	50	9	6	1	5	7	0	1	8	8	2	H	5	T	NT
Pz 38(t)F	TK	11/40	46	216	5	2	50	11	6	1	5	7	0	1	9	9	2	H	5	T	NT
Pz IA	TK	2/35	46	120	5	3	40	4	2	1	3	1	0	1	6	7	1	H	5	T	NT

GERMANY, cont.

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
Pz IB	TK	8/35	46	120	5	3	39	5	2	1	3	1	0	1	7	7	1	H	5	T	NT
Pz IIA	TK	5/37	46	132	6	3	45	8	6	1	4	3	0	1	7	9	2	H	5	T	NT
Pz IIF	TK	1/40	46	168	5	3	45	10	6	1	4	3	0	1	8	8	2	H	5	T	NT
Pz IIIE	TK	7/39	46	156	5	2	42	14	6	1	5	7	0	1	8	9	2	H	4	T	NT
Pz IIIG	TK	8/40	46	192	5	2	42	13	7	1	6	7	0	1	9	9	2	H	4	T	NT
Pz IIH	TK	2/41	46	216	5	2	41	11	8	1	7	7	0	1	10	9	2	H	4	T	NT
Pz IIJ	TK	3/42	46	228	5	2	41	11	9	1	8	11	0	1	10	9	2	H	4	T	NT
Pz IIIL	TK	7/42	46	264	5	2	41	11	10	1	9	11	1	1	10	9	3	H	4	T	NT
Pz IIIN	TK	9/42	46	276	5	2	41	8	11	1	12	11	0	1	10	9	2	H	4	T	NT
Pz IVC	TK	1/39	46	180	5	2	46	11	4	1	9	4	0	1	7	6	2	H	4	T	NT
Pz IVD	TK	1/40	46	252	5	2	46	11	5	1	11	8	0	1	8	8	2	H	4	T	NT
Pz IVF2	TK	6/42	46	276	5	2	45	12	8	2	13	14	0	1	9	8	2	H	4	T	NT
Pz IVG	TK	9/42	46	288	5	2	46	11	9	2	13	14	0	1	10	8	2	H	4	T	NT
Pz IVH	TK	1/43	46	300	5	2	46	11	10	2	13	14	0	1	11	8	2	H	4	T	NT
Pz IVJ	TK	7/44	46	312	5	2	57	11	10	2	13	15	1	1	11	9	4	H	4	T	NT
Tiger	TK	1/43	46	420	5	2	28	13	11	2	15	17	1	1	18	11	4	H	3	T	NT
251/1	TPT	9/39	46	144	6	1	55	7	2	1	2	1	1	0	7	0	1	H	3	HT	NT
Truck	TPT	9/36	46	48	8	1	55	4	1	1	0	0	0	0	1	0	0	S	1	W	NT
Wagon	TPT	9/36	46	24	4	1	0	0	0	1	0	0	0	0	1	0	0	S	1	W	NT

HUNGARY

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
5cm PaK	AT	8/41	46	168	0	2	0	9	9	1	7	11	0	1	8	8	0	S	9	TO	NT
7.5cm PaK	AT	8/42	46	180	0	2	0	8	10	2	11	15	0	1	8	8	0	S	9	TO	NT
StuG IIB	AT	3/40	46	252	5	1	41	6	5	2	11	8	0	1	10	8	0	H	5	T	NT
Ju-52	ATP	1/40	46	144	10	1	-	4	0	1	0	0	0	0	5	4	0	A	1	A	-
105mm	ATY	1/40	46	252	0	1	0	8	2	4	15	6	0	1	2	6	0	S	2	TO	NT
75mm	ATY	9/38	46	180	0	1	0	9	2	3	11	4	0	1	2	6	0	S	2	TO	NT
Fortification	FRT	1/38	46	204	0	2	0	10	5	1	8	4	2	4	10	8	3	H	8	TO	-
Strongpoint	FRT	1/38	46	180	0	2	0	10	5	1	4	2	2	2	10	8	3	H	8	TO	-
Me-109e	FTR	1/40	46	492	13	2	-	7	5	1	3	2	14	1	8	10	0	A	1	A	-
FW-190F	FTR	6/43	46	636	14	2	-	8	6	1	3	3	19	1	9	14	0	A	1	A	-
Cavalry	INF	1/38	46	132	5	3	0	6	2	1	4	1	0	1	4	7	0	S	6	L	NT
Regular	INF	1/38	46	108	3	3	0	6	1	1	4	1	0	1	5	7	0	S	8	L	AM
Tatra	RCN	1/37	46	168	8	4	55	8	6	1	2	2	2	1	7	6	1	H	6	W	NT
Ju-87	TB	9/39	46	432	11	2	-	5	2	1	10	9	4	5	8	4	0	A	1	A	-
B1-bis	TK	8/41	46	312	4	2	40	14	7	1	13	8	0	1	11	11	2	H	3	T	NT
BT-5	TK	4/34	46	204	8	2	55	11	6	1	4	7	0	1	9	8	1	H	4	T	NT
Pz 38(X)A	TK	5/39	46	192	5	2	50	9	6	1	5	7	0	1	7	8	2	H	5	T	NT
Turan-1	TK	2/43	46	180	4	2	55	11	6	1	3	3	0	1	9	8	1	H	5	T	NT
Turan-2	TK	10/44	46	192	4	2	55	11	6	1	4	7	0	1	9	8	1	H	5	T	NT
Truck	TPT	9/36	46	48	8	1	55	4	1	1	0	0	0	0	1	0	0	S	1	W	NT
Wagon	TPT	9/36	46	24	4	1	0	0	0	1	0	0	0	0	1	0	0	S	1	W	NT

ITALY

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
20mm	AD	2/37	46	120	0	2	0	9	4	2	2	4	7	1	6	6	0	S	9	TO	NT
20mm	AD	6/38	46	144	8	2	40	9	4	2	2	4	7	1	2	6	0	S	4	W	NT
47mm	AT	2/36	46	144	0	2	0	9	7	1	4	8	0	1	8	8	0	S	9	TO	NT
S-47	AT	5/42	46	168	5	2	45	7	7	1	5	8	0	1	6	6	0	H	4	T	NT
S-75	AT	7/43	46	288	5	2	48	7	9	1	11	12	1	1	9	9	1	H	5	T	NT
S-90	AT	8/43	46	348	3	2	45	4	10	2	13	18	0	2	7	6	0	H	5	T	NT
Ju-52	ATP	1/38	46	144	10	1	-	4	0	1	0	0	0	0	5	4	0	A	1	A	-
100mm	ATY	1/38	46	192	0	1	0	8	1	3	12	5	0	1	2	6	0	S	2	TO	NT
149mm	ATY	1/38	46	264	0	1	0	7	1	4	15	9	0	1	2	6	0	S	2	TO	NT
47mm	ATY	7/42	46	204	5	1	45	7	7	2	5	6	0	0	8	6	0	H	3	W	NT
75mm	ATY	1/38	46	156	0	1	0	9	1	3	9	4	0	1	2	6	0	S	2	TO	NT
75mm	ATY	1/42	46	288	5	1	48	7	7	3	11	10	1	0	9	9	1	H	3	T	NT
Littorio	CS	5/40	46	432	4	1	-	20	10	6	10	6	8	18	10	8	0	N	1	N	-
Zara	CS	1/33	46	336	5	1	-	20	9	5	7	4	6	14	7	7	0	N	1	N	-
Condottieri	CS	1/36	46	252	6	1	-	20	8	4	4	2	4	11	6	5	0	N	1	N	-
Aquila	CV	5/40	46	576	5	1	-	20	10	1	1	1	6	2	5	6	0	N	1	N	-
Soldati	DD	12/37	46	180	6	2	-	20	10	3	4	2	4	14	4	4	3	N	1	N	-
Fortification	FRT	1/38	46	204	0	2	0	10	5	1	8	4	2	4	10	8	3	H	8	TO	-
Strongpoint	FRT	1/38	46	180	0	2	0	10	5	1	4	2	2	2	10	8	3	H	8	TO	-
G.55	FTR	6/43	46	564	14	2	-	8	7	1	3	2	15	1	8	14	0	A	1	A	-
MC.200	FTR	6/39	46	408	11	2	-	8	4	1	2	2	10	0	8	9	0	A	1	A	-
MC.202	FTR	11/41	46	456	12	2	-	11	5	1	2	2	12	1	8	10	0	A	1	A	-
MC.205	FTR	4/43	46	543	13	2	-	8	6	1	2	2	15	1	8	13	0	A	1	A	-
Re.2000	FTR	6/40	46	372	13	2	-	8	3	1	2	2	8	1	8	8	0	A	1	A	-
Re.2005	FTR	5/43	46	564	14	2	-	7	5	1	5	4	14	2	10	13	0	A	1	A	-
Alpini	INF	6/40	46	144	3	2	0	6	1	1	5	2	0	1	6	7	0	S	8	L	AM
Bersagliere	INF	6/40	46	156	3	2	0	8	1	1	6	2	0	1	7	8	0	S	8	L	AM

ITALY cont.

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
Engineer	INF	1/38	46	192	3	2	0	6	1	1	5	4	0	1	7	8	0	S	8	L	AM
Regular	INF	1/38	46	120	3	2	0	6	0	1	5	1	0	1	5	7	0	S	8	L	AM
Naval Transport	NTP	1/40	46	168	5	1	-	0	1	1	0	0	0	0	4	8	0	N	2	N	-
AB-41	RCN	8/41	46	156	8	4	70	15	6	1	3	3	1	1	7	7	2	H	6	AT	NT
BA.65	TB	1/38	46	384	12	2	-	6	1	1	8	7	4	3	6	4	0	A	1	A	-
CA.311	TB	1/39	46	420	12	2	-	6	1	1	8	7	4	3	8	4	0	A	1	A	-
L6/40	TK	5/41	46	156	5	2	45	10	6	1	3	3	0	1	11	3	1	H	5	T	NT
M13/40	TK	12/40	46	204	4	2	45	11	7	1	6	7	0	1	8	9	2	H	4	T	NT
M14/41	TK	1/42	46	204	4	2	45	11	8	1	6	7	0	1	8	9	2	H	4	T	NT
M15/42	TK	9/43	46	240	5	2	47	12	8	1	7	8	0	1	9	9	2	H	4	T	NT
P26/40	TK	1/44	46	336	5	2	45	10	9	1	12	11	0	1	11	10	2	H	4	T	NT
Truck	TPT	9/36	46	48	8	1	55	4	1	1	0	0	0	0	1	0	0	S	1	W	NT
Wagon	TPT	9/36	46	24	4	1	0	0	0	1	0	0	0	0	1	0	0	S	1	W	NT

NATIONALIST

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR	
20mm Flak	AD	4/32	46	108	0	2	0	12	5	2	3	2	7	1	2	6	0	S	9	9	TO	NT
3.7cm PaK	AT	4/37	40	132	0	2	0	10	6	1	4	7	0	1	8	8	0	S	9	9	TO	NT
47mm	AT	4/36	46	156	0	2	0	9	7	1	4	8	0	1	8	8	0	S	9	9	TO	NT
7.5cm PaK	AT	3/42	46	216	0	2	0	8	10	2	11	15	0	1	8	8	0	S	9	9	TO	NT
StuG IIIG	AT	7/43	46	300	5	2	40	8	10	2	11	15	1	1	11	9	1	H	5	5	T	NT
Ju-52	ATP	1/38	40	144	10	1	0	4	0	1	0	0	0	0	5	4	0	A	1	A	-	
149mm	ATY	1/36	40	252	0	1	0	7	1	4	13	7	0	1	2	6	0	S	2	2	TO	NT
65mm	ATY	1/36	40	144	0	1	0	9	1	3	7	2	0	1	2	6	0	S	2	2	TO	NT
Fortification	FRT	1/38	46	204	0	2	0	10	5	1	8	4	2	4	10	8	3	H	8	8	TO	-
Strongpoint	FRT	1/38	46	180	0	2	0	10	5	1	4	2	2	2	10	8	3	H	8	8	TO	-
Bf-109b	FTR	6/37	40	492	13	2	-	7	5	1	2	2	14	1	8	10	0	A	1	A	-	
Legionnaire	INF	1/35	40	132	3	2	0	8	1	1	6	2	0	1	5	6	0	S	8	8	L	AM
Millitia	INF	1/35	40	60	3	2	0	6	0	1	2	1	0	1	3	3	0	S	6	6	L	NT
Regular	INF	1/35	40	72	3	2	0	6	0	1	2	1	0	1	4	4	0	S	8	8	L	AM
Pz IA	TK	7/35	40	144	5	3	40	4	2	1	3	1	0	1	6	7	1	H	5	5	T	NT
Pz IB	TK	2/36	40	144	5	3	39	5	2	1	3	1	0	1	7	7	1	H	5	5	T	NT
Pz IIG	TK	5/42	46	276	5	2	41	11	9	1	8	11	0	1	10	9	2	H	4	4	T	NT
Truck	TPT	9/36	40	48	8	1	55	4	1	1	0	0	0	0	1	0	0	S	1	1	W	NT
Wagon	TPT	9/36	46	24	4	1	0	0	0	1	0	0	0	0	1	0	0	S	1	1	W	NT

NORWAY

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR	
47mm	AT	7/38	41	156	0	2	0	9	7	1	4	8	0	1	8	8	0	S	9	9	TO	NT
75mm	ATY	9/39	42	180	0	1	0	9	1	3	11	4	0	1	2	6	0	S	2	2	TO	NT
Fortification	FRT	1/38	46	204	0	2	0	10	5	1	8	4	2	4	10	8	3	H	8	8	TO	-
Strongpoint	FRT	1/38	46	180	0	2	0	10	5	1	4	2	2	2	10	8	3	H	8	8	TO	-
Regular	INF	1/38	46	120	3	2	0	5	1	1	5	1	0	1	5	7	0	S	8	8	L	AM
Wagon	TPT	9/36	46	30	4	1	0	0	0	1	0	0	0	0	1	0	0	S	1	1	W	NT

POLAND

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
17 Pdr	AT	6/44	46	252	0	2	0	7	11	2	6	21	0	1	8	8	0	S	8	TO	NT
47mm	AT	5/36	46	144	0	2	0	9	7	1	4	8	0	1	8	8	0	S	9	TO	NT
C-47	ATP	1/43	46	192	12	1	-	1	0	1	0	0	0	0	5	8	0	A	1	A	-
105mm	ATY	1/40	41	252	0	1	0	8	2	4	15	6	0	1	2	6	0	S	2	TO	NT
105mm	ATY	9/43	46	252	0	1	0	8	0	4	16	6	0	0	2	6	0	S	2	TO	NT
75mm	ATY	6/40	41	156	0	1	0	9	1	3	9	4	0	1	2	6	0	S	2	TO	NT
Fortification	FRT	1/38	46	204	0	2	0	10	5	1	8	4	2	4	10	8	3	H	8	TO	-
Strongpoint	FRT	1/38	46	180	0	2	0	10	5	1	4	2	2	2	10	8	3	H	8	TO	-
P24	FTR	1/38	41	348	12	2	-	6	3	1	3	3	6	1	7	8	0	A	1	A	-
Cavalry	INF	11/38	41	96	5	3	0	7	1	1	4	1	0	1	2	5	0	S	6	L	NT
Engineer	INF	11/38	46	144	3	2	0	5	1	1	4	2	0	1	4	7	0	S	8	L	AM
Paratrooper	INF	1/43	46	204	3	2	0	7	0	1	8	5	1	0	9	8	0	S	8	L	AB
Regular	INF	1/38	46	108	3	2	0	5	0	1	5	1	0	1	3	7	0	S	8	L	AM
Regular	INF	12/39	46	132	3	2	0	6	1	1	6	2	0	0	6	7	0	S	8	L	AM
M8	RCN	1/44	46	192	8	4	81	9	7	1	3	9	2	1	7	6	1	H	6	AT	NT
P23B	TB	1/38	41	372	11	2	-	5	1	1	6	6	4	3	9	6	0	A	1	A	-
7TP	TK	3/35	41	168	4	2	41	8	6	1	5	7	0	1	6	6	1	H	4	T	NT
M4A1	TK	8/44	46	264	5	2	45	12	9	1	13	12	2	1	12	9	3	H	3	T	NT
M5A1	TK	1/44	46	216	7	3	41	14	7	1	5	9	1	1	10	8	3	H	5	T	NT
R35	TK	5/39	41	144	4	3	41	10	3	1	3	4	0	1	8	7	1	H	5	T	NT
TKS	TK	3/36	41	96	5	2	41	10	3	1	3	1	0	1	4	4	1	H	5	T	NT
Truck	TPT	9/36	46	48	8	1	55	4	1	1	0	0	0	0	1	0	0	S	1	W	NT
Wagon	TPT	9/36	46	24	4	1	0	0	0	1	0	0	0	0	1	0	0	S	1	W	NT

REPUBLICAN

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
47mm	AT	6/36	46	156	0	2	0	9	7	1	4	8	0	1	8	8	0	S	9	TO	NT
C-47	ATP	9/39	46	192	12	1	-	1	0	1	0	0	0	0	5	8	0	A	1	A	-
155mm	ATY	1/37	46	288	0	1	0	7	1	4	15	9	0	1	2	6	0	S	2	TO	NT
75mm	ATY	1/37	46	168	0	1	0	9	1	3	9	4	0	1	2	6	0	S	2	TO	NT
Fortification	FRT	1/38	46	204	0	2	0	10	5	1	8	4	2	4	10	8	3	H	8	TO	-
Strongpoint	FRT	1/38	46	180	0	2	0	10	5	1	4	2	2	2	10	8	3	H	8	TO	-
Rala	FTR	1/37	46	348	12	2	-	6	3	1	2	2	8	1	7	7	0	A	1	A	-
Brigade	INF	1/35	40	132	3	2	0	8	1	1	6	2	0	1	5	6	0	S	8	L	AM
Millia	INF	1/35	40	60	2	2	0	6	0	1	2	1	0	1	3	3	0	S	6	L	NT
Regular	INF	1/35	40	72	3	2	0	6	0	1	2	1	0	1	4	4	0	S	8	L	AM
BA-6	RCN	1/36	46	180	7	4	55	7	5	1	1	7	0	1	8	7	1	H	6	AT	NT
BT-5	TK	4/34	46	204	8	2	55	11	6	1	5	7	0	1	9	8	1	H	4	T	NT
T-26	TK	4/33	46	180	5	2	45	14	5	1	4	7	0	1	10	6	3	H	3	T	NT
Truck	TPT	9/36	46	48	8	1	55	4	1	1	0	0	0	0	1	0	0	S	1	W	NT
Wagon	TPT	9/36	46	24	4	1	0	0	0	1	0	0	0	0	1	0	0	S	1	W	NT

ROMANIA

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
37mm Flak	AD	9/40	46	144	0	2	0	20	4	2	4	7	9	1	2	6	0	S	8	TO	NT
47mm	AT	8/36	46	156	0	2	0	9	7	1	4	8	0	1	8	8	0	S	9	TO	NT
7.5cm PaK	AT	4/42	46	228	0	2	0	8	10	2	11	15	0	1	8	8	0	S	8	TO	NT
Maresal	AT	8/44	46	240	5	2	40	8	10	2	11	15	0	1	10	9	1	H	5	T	NT
StuG IIG	AT	12/42	46	276	5	2	40	8	10	2	11	15	1	1	11	9	1	H	5	T	NT
Ju-52	ATP	11/41	46	144	10	1	-	4	0	1	0	0	0	0	5	4	0	A	1	A	-
100mm	ATY	6/40	46	216	0	1	0	8	1	3	12	6	0	1	2	6	0	S	2	TO	NT
75mm	ATY	6/40	46	156	0	1	0	9	1	3	9	4	0	1	2	6	0	S	2	TO	NT
Fortification	FRT	1/38	46	204	0	2	0	10	5	1	8	4	2	4	10	8	3	H	8	TO	-
Strongpoint	FRT	1/38	46	180	0	2	0	10	5	1	4	2	2	2	10	8	3	H	8	TO	-
Me-109e	FTR	1/44	46	492	13	2	-	7	5	1	2	2	14	1	8	10	0	A	1	A	-
IAR 80	FTR	2/41	46	312	11	2	-	6	1	1	2	2	6	0	7	6	0	A	1	A	-
P24	FTR	2/40	46	288	12	2	-	6	3	1	2	1	5	1	7	5	0	A	1	A	-
Cavalry	INF	6/40	46	132	5	3	0	6	1	1	4	1	0	1	5	6	0	S	6	L	NT
Regular	INF	1/38	46	120	3	2	0	6	1	1	5	1	0	1	6	7	0	S	8	L	AM
IAR 81	TB	11/41	46	360	11	2	-	6	1	1	8	5	4	3	8	4	0	A	1	A	-
Pz IIG	TK	5/42	46	276	5	2	41	11	9	1	8	11	0	1	10	9	2	H	4	T	NT
Pz IIG	TK	2/43	46	348	5	2	46	11	8	2	12	14	0	1	10	8	2	H	4	T	NT
R2	TK	7/37	46	168	5	2	50	9	4	1	5	6	0	1	8	8	2	H	5	T	NT
R35	TK	5/39	42	156	4	3	41	11	3	1	3	5	0	1	8	7	1	H	5	T	NT
Truck	TPT	9/36	46	48	8	1	55	4	1	1	0	0	0	0	1	0	0	S	1	W	NT
Wagon	TPT	9/36	46	24	4	1	0	0	0	1	0	0	0	0	1	0	0	S	1	W	NT

UNITED KINGDOM

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
20mm	AD	9/36	46	120	0	2	0	12	6	2	1	3	7	1	2	6	0	S	9	TO	NT
40mm	AD	11/39	46	192	0	2	0	10	4	2	9	12	10	1	2	6	0	S	8	TO	NT
40mm	AD	4/43	46	252	8	2	60	8	4	2	9	10	10	1	2	6	0	S	4	W	NT
17 Pdr	AT	7/43	46	240	0	2	0	7	11	2	6	21	0	1	8	8	0	S	8	TO	NT
2 Pdr	AT	8/36	46	132	0	2	0	10	7	1	1	8	0	1	8	8	0	S	9	TO	NT
6 Pdr	AT	5/42	46	168	0	2	0	9	8	1	3	12	0	1	8	8	0	S	9	TO	NT
Achilles	AT	7/44	46	324	6	2	51	7	11	2	7	21	1	1	10	6	0	H	4	T	NT
Wolverine	AT	9/43	46	276	6	2	48	8	10	2	7	15	1	1	10	6	0	H	4	T	NT
C-47	ATP	1/41	46	192	12	1	-	1	0	1	0	0	0	0	5	8	0	A	1	A	-
25 Pdr	ATY	4/40	46	204	0	1	0	9	1	3	13	5	0	1	2	6	0	S	2	TO	NT
3 inch	ATY	1/38	46	180	0	1	0	9	0	3	12	4	0	0	2	6	0	S	2	TO	NT
5.5 inch	ATY	5/42	46	276	0	1	0	7	1	4	17	8	0	1	2	6	0	S	2	TO	NT
7.2 inch	ATY	6/43	46	324	0	1	0	6	1	4	19	11	0	6	2	6	0	S	2	TO	NT
Bishop	ATY	8/42	46	300	3	1	40	5	7	3	13	5	1	1	9	8	1	H	3	T	NT
Sexton	ATY	6/44	46	336	4	1	40	4	7	4	16	5	1	1	9	8	1	H	4	T	NT
King George V	CS	11/40	46	492	4	1	-	20	13	6	12	8	10	20	12	10	0	N	1	N	-
Renoun	CS	9/16	46	420	4	1	-	20	11	6	9	5	8	16	10	9	0	N	1	N	-
County	CS	1/39	46	348	5	1	-	20	10	5	7	4	6	12	9	8	0	N	1	N	-
Leader	CS	3/33	46	276	4	1	-	20	9	4	6	3	4	8	7	6	0	N	1	N	-
Illustrious	CV	5/40	46	576	4	1	-	20	10	1	1	1	6	2	5	6	0	N	1	N	-
Tribal	DD	6/38	46	192	5	2	-	20	13	3	6	3	3	16	3	4	3	N	1	N	-
Fortification	FRT	1/38	46	204	0	2	0	10	5	1	8	4	2	4	10	8	3	H	8	TO	-
Strongpoint	FRT	1/38	46	180	0	2	0	10	5	1	4	2	2	2	10	8	3	H	8	TO	-
Hurricane	FTR	1/37	46	420	13	2	-	6	4	1	2	1	10	1	8	10	0	A	1	A	-
Spitfire I	FTR	6/38	46	456	13	2	-	6	5	1	2	1	12	1	8	10	0	A	1	A	-
Spitfire IX	FTR	7/42	46	588	14	2	-	4	6	1	2	2	16	1	9	14	0	A	1	A	-
Spitfire V	FTR	6/41	46	516	13	2	-	3	5	1	2	2	14	1	8	12	0	A	1	A	-
Spitfire XII	FTR	1/43	46	648	14	2	-	4	6	1	2	2	18	1	9	16	0	A	1	A	-

UNITED KINGDOM cont.

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
Spitfire XIV	FTR	11/44	46	720	14	2	-	4	7	1	3	2	21	1	9	18	0	A	1	A	-
Australian	INF	12/39	46	132	3	2	0	6	1	1	6	2	0	0	6	7	0	S	8	L	AM
Canadian	INF	12/39	46	132	3	2	0	6	1	1	6	2	0	0	6	7	0	S	8	L	AM
Engineer	INF	12/39	46	240	3	2	0	6	2	1	8	6	2	0	9	10	0	S	8	L	AM
Commando	INF	6/43	46	228	3	3	0	5	2	1	8	5	1	1	9	10	0	S	8	L	AB
Bridge Engineer	INF	1/38	46	168	3	2	0	6	2	1	6	4	2	0	7	8	0	S	8	L	AM
Ghurka	INF	12/39	46	192	3	3	0	6	2	1	8	2	0	0	8	7	0	S	10	L	AM
Home Guard	INF	12/39	46	96	2	2	0	6	0	1	4	2	0	0	4	6	0	S	6	L	NT
Indian	INF	12/39	46	132	3	2	0	6	1	1	6	2	0	0	6	7	0	S	8	L	AM
New Zealand	INF	12/39	46	132	3	2	0	6	1	1	6	2	0	0	6	7	0	S	8	L	AM
Paratrooper	INF	12/39	46	204	3	2	0	7	0	1	8	6	1	0	9	8	0	S	8	L	AB
Regular	INF	1/38	46	132	3	2	0	6	1	1	6	2	0	0	6	7	0	S	8	L	AM
Royal Marine	INF	12/39	46	168	3	2	0	6	1	1	6	2	1	0	7	8	0	S	8	L	AM
Naval Transport	NTP	1/40	46	168	5	1	-	0	1	1	0	0	0	0	4	8	0	N	2	N	-
AEC I	RCN	10/42	46	240	7	4	65	8	7	1	2	8	0	1	10	7	2	H	6	AT	NT
AEC II	RCN	6/43	46	276	7	4	65	7	8	1	2	13	0	1	10	7	2	H	6	AT	NT
AEC III	RCN	5/44	46	288	7	4	65	6	9	1	11	12	0	1	10	7	2	H	6	AT	NT
Daimler	RCN	7/42	46	204	8	4	65	8	7	1	5	9	1	1	6	7	1	H	6	AT	NT
Daimler SC	RCN	5/40	46	144	7	4	65	10	3	1	2	1	0	1	8	4	2	H	6	AT	NT
Humber II	RCN	11/41	46	156	8	4	65	10	3	1	2	5	0	1	6	7	2	H	6	AT	NT
Humber IV	RCN	8/43	46	156	8	4	65	10	3	1	2	5	0	1	6	7	2	H	6	AT	NT
Slaghound I	RCN	1/44	46	228	8	4	65	10	3	1	5	8	1	1	10	7	2	H	6	AT	NT
Beaufighter Mk VI	TB	8/41	46	552	14	2	-	5	3	1	9	12	6	4	11	10	0	A	1	A	-
Hurricane II	TB	3/42	46	432	12	2	-	4	4	1	3	9	6	3	9	8	0	A	1	A	-
Hurricane IV	TB	10/43	46	444	13	2	-	4	4	1	6	6	6	2	9	10	0	A	1	A	-
Mosquito VI	TB	3/41	46	648	14	2	-	5	5	1	8	7	14	3	13	14	0	A	1	A	-
Tempest	TB	4/44	46	648	15	2	-	4	6	1	6	7	16	2	10	14	0	A	1	A	-
Typhoon	TB	11/42	46	540	14	2	-	4	5	1	5	6	12	2	10	12	0	A	1	A	-
Centurion	TK	5/45	46	504	5	2	47	7	11	2	13	23	0	1	15	10	2	H	4	T	NT

UNITED KINGDOM cont.

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
Challenger	TK	6/44	46	348	5	2	47	7	11	2	11	21	0	1	10	8	2	H	3	T	NT
Churchill III	TK	8/42	46	264	4	2	40	11	8	1	5	10	0	1	12	9	4	H	3	T	NT
Churchill IV	TK	10/42	46	324	3	2	40	10	8	1	7	12	0	1	14	11	4	H	3	T	NT
Comet	TK	10/44	46	348	6	2	45	9	10	2	12	16	0	1	12	11	2	H	4	T	NT
Cromwell IV	TK	6/44	46	288	6	2	53	8	9	1	12	12	0	1	11	7	2	H	4	T	NT
Cromwell VII	TK	6/44	46	324	6	2	53	9	9	1	12	12	0	1	13	8	2	H	4	T	NT
Cruiser A13	TK	11/39	46	156	6	2	43	12	7	1	3	8	0	1	6	7	2	H	4	T	NT
Crusader I	TK	6/41	46	180	5	2	41	14	7	1	3	8	0	1	9	7	2	H	5	T	NT
Crusader II	TK	11/41	46	192	5	2	41	14	7	1	3	8	0	1	10	8	2	H	5	T	NT
Crusader III	TK	6/42	46	240	5	2	41	8	8	1	1	13	0	1	10	8	2	H	5	T	NT
Firefly	TK	6/44	46	384	5	2	45	8	11	2	11	21	0	1	12	9	2	H	3	T	NT
Grant	TK	5/42	46	240	5	2	45	14	7	1	10	9	0	1	11	8	3	H	3	T	NT
Matilda II	TK	2/40	46	264	3	2	51	12	7	1	2	8	0	1	14	9	2	H	4	T	NT
MK VI	TK	7/37	46	96	6	3	50	10	3	1	3	2	0	0	4	4	1	H	5	T	NT
Sherman III	TK	10/42	46	288	5	2	45	11	9	1	12	12	1	1	12	9	3	H	3	T	NT
Stuart I	TK	11/42	46	204	6	3	35	12	7	1	3	9	1	1	9	8	2	H	4	T	NT
Stuart III	TK	12/42	46	252	7	3	41	14	7	1	5	9	1	1	14	9	2	H	5	T	NT
Valentine V	TK	11/42	46	264	3	2	51	10	7	1	3	8	0	1	14	9	2	H	5	T	NT
Valentine XI	TK	10/44	46	360	4	2	51	10	9	1	12	13	0	1	14	9	2	H	5	T	NT
Vickers	TK	2/37	46	108	4	2	51	10	4	1	2	1	0	1	6	5	2	H	5	T	NT
Bren Carrier	TPT	1/39	46	144	8	1	60	4	0	1	2	1	0	0	7	0	0	H	3	HT	NT
Truck	TPT	1/36	46	48	8	1	69	4	0	1	0	0	0	0	1	0	0	H	1	W	NT
Truck	TPT	1/36	46	48	8	1	69	4	0	1	0	0	0	0	1	0	0	H	1	W	NT

UNITED STATES

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
3 inch	AD	2/39	46	240	0	3	0	8	6	2	8	14	9	1	2	6	0	S	7	TO	NT
90mm	AD	6/44	46	300	0	3	0	8	6	3	13	18	10	1	2	6	0	S	6	TO	NT
M15A1	AD	11/42	46	204	7	2	57	6	6	2	3	7	11	1	4	9	0	H	4	HT	NT
M16	AD	3/44	46	228	7	2	57	6	4	1	7	1	12	0	4	9	0	H	4	HT	NT
37mm	AT	7/38	46	144	0	2	0	10	7	1	4	8	0	1	8	8	0	S	9	TO	NT
57mm	AT	10/42	46	168	0	2	0	9	8	1	3	12	0	1	8	8	0	S	9	TO	NT
76mm	AT	4/44	46	192	0	2	0	7	10	2	11	15	0	1	8	8	0	S	8	TO	NT
M10	AT	3/43	46	264	6	2	57	7	10	2	11	15	1	1	10	6	0	H	4	T	NT
M18	AT	8/44	46	264	8	2	42	6	10	2	11	15	1	1	7	6	0	H	5	T	NT
M3	AT	7/38	46	168	7	2	57	7	6	1	5	9	1	1	6	6	0	H	5	HT	NT
M36	AT	8/44	46	324	6	2	41	7	11	2	13	19	1	2	10	6	0	H	4	T	NT
C-47	ATP	1/41	46	192	12	1	-	1	0	1	0	0	0	0	5	8	0	A	1	A	-
105mm	ATY	8/42	46	240	0	1	0	8	0	4	16	6	0	0	2	6	0	S	2	TO	NT
155mm	ATY	1/38	46	324	0	1	0	7	0	4	20	11	0	1	2	6	0	S	2	TO	NT
75mm	ATY	1/38	46	180	0	1	0	9	0	3	12	4	0	0	2	6	0	S	2	TO	NT
8 inch	ATY	1/44	46	372	0	1	0	6	0	5	21	13	0	6	2	6	0	S	2	TO	NT
M12	ATY	6/44	46	384	5	1	48	4	5	4	19	11	0	1	7	6	0	H	3	T	NT
M7	ATY	11/42	46	312	5	1	52	7	4	4	15	6	2	0	7	6	0	H	3	T	NT
M8	ATY	9/43	46	228	7	1	46	7	3	3	11	4	2	0	7	6	1	H	4	T	NT
T19	ATY	4/45	46	432	4	1	4	6	0	4	21	13	0	6	2	6	0	H	3	T	NT
Iowa	CS	2/43	46	516	4	1	-	20	13	6	13	9	11	21	12	11	0	N	1	N	-
Baltimore	CS	4/43	46	384	5	1	-	20	12	5	8	5	9	14	7	10	0	N	1	N	-
Brooklyn	CS	7/38	46	276	5	1	-	20	12	4	5	2	6	9	5	7	0	N	1	N	-
Essex	CV	12/42	46	660	5	1	-	20	12	1	1	1	7	8	6	7	0	N	1	N	-
Yorktown	CV	1/38	46	588	5	1	-	20	12	1	1	1	6	6	5	6	0	N	1	N	-
Fletcher	DD	1/43	46	180	5	1	-	20	13	3	3	2	3	13	4	5	3	N	1	N	-
Fortification	FRT	1/38	46	204	0	2	0	10	5	1	8	4	2	4	10	8	3	H	8	TO	-
Strongpoint	FRT	1/38	46	180	0	2	0	10	5	1	4	2	2	2	10	8	3	H	8	TO	-
P-38F	FTR	1/42	46	588	12	2	-	7	4	1	5	5	14	3	10	14	0	A	1	A	-

UNITED STATES, cont.

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
P-38F	FTR	6/42	46	600	14	2	-	7	4	1	6	5	15	3	10	14	0	A	1	A	-
P-38J	FTR	1/43	46	624	14	2	-	7	5	1	7	5	16	3	10	14	0	A	1	A	-
P-38L	FTR	10/43	46	660	14	2	-	7	5	1	7	5	18	3	10	14	0	A	1	A	-
P-40F	FTR	12/41	46	456	13	2	-	7	5	1	2	2	11	0	8	11	0	A	1	A	-
P-47C	FTR	1/43	46	612	14	2	-	4	5	1	5	5	15	2	11	14	0	A	1	A	-
P-47D	FTR	9/43	46	648	14	2	-	4	5	1	6	6	16	2	11	15	0	A	1	A	-
P-47N	FTR	5/45	46	720	14	2	-	5	5	1	7	7	19	3	11	16	0	A	1	A	-
P-51B	FTR	6/43	46	636	14	2	-	9	6	1	2	2	18	0	10	15	0	A	1	A	-
P-51D	FTR	1/44	46	684	14	2	-	11	6	1	2	2	19	0	10	17	0	A	1	A	-
P-51H	FTR	1/45	46	744	14	2	-	11	6	1	3	2	22	0	10	18	0	A	1	A	-
P-80	FTR	6/45	46	670	14	2	-	13	7	1	4	3	24	0	11	19	0	A	1	A	-
Engineer	INF	12/41	46	228	3	2	0	6	1	1	7	6	0	1	8	9	0	S	8	L	AM
Bridge Engineer	INF	1/38	46	168	3	2	0	6	1	1	6	4	0	1	6	9	0	S	8	L	AM
Marine	INF	12/41	46	180	3	2	0	6	1	1	6	4	0	1	7	9	0	S	8	L	AM
National Guard	INF	1/38	46	108	2	2	0	6	0	1	4	2	0	1	5	7	0	S	6	L	NT
Paratrooper	INF	12/41	46	192	3	2	0	6	1	1	7	3	0	1	8	9	0	S	8	L	AB
Ranger	INF	12/41	46	216	3	3	0	6	1	1	8	6	0	1	8	9	0	S	8	L	AB
Regular	INF	1/38	46	144	3	2	0	6	1	1	6	4	0	1	6	9	0	S	8	L	AM
Naval Transport	NTP	1/40	46	168	5	1	-	0	1	1	0	0	0	0	4	8	0	N	2	N	-
M20	RCN	1/42	46	156	6	4	81	9	7	1	3	3	2	1	7	6	1	H	6	AT	NT
M24	RCN	12/44	46	300	7	4	41	7	9	1	11	12	2	1	10	8	3	H	6	AT	NT
M8	RCN	1/42	46	192	8	4	81	9	7	1	3	9	2	1	7	6	1	H	6	AT	NT
Scout Car	RCN	1/40	46	108	8	4	80	6	3	1	2	1	1	0	5	5	0	H	4	AT	NT
A-20	TB	6/41	46	672	14	2	-	5	3	1	12	14	12	5	12	10	0	A	1	A	-
A-26B	TB	1/44	46	792	14	2	-	9	5	1	14	15	15	5	14	14	0	A	1	A	-
B-25D	TB	2/42	46	540	12	2	-	10	3	1	7	7	10	10	13	10	0	A	1	A	-
B-25H	TB	2/44	46	720	12	2	-	10	3	1	17	14	10	10	13	10	0	A	1	A	-
B-25J	TB	4/44	46	636	12	2	-	10	3	1	11	7	12	10	14	12	0	A	1	A	-

UNITED STATES, cont.

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
B-26B	TB	5/42	46	636	12	2	-	5	4	1	14	10	12	5	12	9	0	A	1	A	-
B-26C	TB	1/43	46	672	12	2	-	5	4	1	14	10	14	5	12	10	0	A	1	A	-
B-26G	TB	1/44	46	768	12	2	-	5	4	1	16	14	14	5	13	13	0	A	1	A	-
M26	TK	3/45	46	492	5	2	41	10	11	2	15	19	2	1	19	11	3	H	4	T	NT
M29	TK	6/45	46	564	4	2	41	10	11	2	16	22	1	1	21	12	3	H	3	T	NT
M244	TK	4/40	46	216	7	3	35	12	7	1	5	9	1	1	9	8	2	H	4	T	NT
M3A1	TK	9/42	46	204	7	3	35	14	7	1	5	9	1	1	9	8	2	H	5	T	NT
M4A1	TK	12/42	46	276	5	2	45	12	9	1	12	12	2	1	12	9	3	H	3	T	NT
M4A1/76	TK	7/44	46	324	5	2	41	11	10	2	13	15	2	1	12	9	3	H	3	T	NT
M4A3	TK	7/43	46	276	6	2	46	13	9	1	13	12	2	1	11	9	3	H	3	T	NT
M4A3/105	TK	7/44	46	348	5	2	46	12	7	2	15	9	2	2	12	9	4	H	3	T	NT
M4A3E2	TK	9/44	46	396	5	2	41	14	9	1	13	12	2	1	18	10	3	H	3	T	NT
M4A3E8/76	TK	9/44	46	336	6	2	41	14	10	2	13	15	2	1	15	9	3	H	3	T	NT
M5A1	TK	12/42	46	228	7	3	41	14	7	1	5	9	1	1	10	8	3	H	5	T	NT
M3A1	TPT	12/41	46	144	8	1	45	10	2	1	2	1	6	1	7	1	1	H	3	T	NT
Truck	TPT	1/39	46	48	8	1	75	4	0	1	0	0	0	0	1	0	0	H	1	W	NT

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
25mm	AD	11/40	46	156	7	2	60	6	5	2	2	5	7	1	2	6	0	S	4	W	NT
37mm	AD	9/39	46	120	0	2	0	12	4	2	4	7	7	1	2	6	0	S	8	TO	NT
76.2mm	AD	8/38	46	216	0	3	0	7	6	2	8	14	9	1	2	6	0	S	7	TO	NT
45mm	AT	8/33	46	132	0	2	0	10	6	1	4	8	0	1	8	8	0	S	9	TO	NT
7.62cm	AT	9/38	46	204	0	2	0	7	9	1	11	14	0	1	8	8	0	S	8	TO	NT
ISU-122	AT	3/44	46	420	4	2	47	5	10	2	15	21	0	1	17	14	0	H	3	T	NT
ISU-152	AT	3/44	46	432	4	2	47	3	8	2	17	19	0	1	17	14	0	H	3	T	NT
SU-100	AT	11/44	46	384	6	2	57	5	11	2	1	21	0	1	14	10	0	H	4	T	NT
SU-122	AT	2/43	46	300	6	1	54	4	4	2	17	9	0	1	14	10	0	H	4	T	NT
SU-152	AT	8/43	46	420	4	2	57	3	8	2	18	19	0	1	14	13	0	H	3	T	NT
SU-76	AT	4/43	46	252	4	2	58	6	8	1	11	11	0	1	10	6	0	H	5	T	NT
SU-85	AT	9/43	46	336	6	2	55	6	9	2	12	15	0	1	14	10	0	H	4	T	NT
C-47	ATP	9/39	46	192	12	1	-	1	0	1	0	0	0	0	5	8	0	A	1	A	-
12.2cm	ATY	9/39	46	264	0	1	0	8	0	4	17	8	0	1	2	6	0	S	2	TO	NT
15.2cm	ATY	9/39	46	312	0	1	0	6	0	4	19	11	0	1	2	6	0	S	2	TO	NT
7.62cm	ATY	1/38	46	180	0	1	0	9	0	3	12	4	0	0	2	6	0	S	2	TO	NT
K-13	ATY	1/42	46	132	5	1	60	4	0	3	5	5	0	0	2	0	0	S	2	W	NT
K-31	ATY	3/43	46	204	5	1	60	4	0	4	8	7	0	0	2	0	0	S	2	W	NT
Sovetskiy Soyuz	CS	10/42	46	528	4	1	-	20	11	6	9	5	7	14	12	8	0	N	1	N	-
Kirov	CS	9/38	46	336	4	1	-	20	10	5	6	4	8	12	7	6	0	N	1	N	-
Leningrad	CS	1/38	46	240	4	1	-	20	9	4	4	3	4	8	5	4	0	N	1	N	-
Storozhevoi	DD	1/42	46	180	5	2	-	20	11	3	5	3	4	15	3	3	3	N	1	N	-
Fortification	FRT	1/38	46	204	0	2	0	10	5	1	8	4	2	4	10	8	3	H	8	TO	-
Strongpoint	FRT	1/38	46	180	0	2	0	10	5	1	4	2	2	2	10	8	3	H	8	TO	-
I-16	FTR	1/38	46	348	12	2	-	6	3	1	2	2	8	1	7	7	0	A	1	A	-
La-5	FTR	3/42	46	456	14	2	-	12	5	1	2	2	10	1	8	12	0	A	1	A	-
La-7	FTR	7/44	46	588	14	2	-	6	6	1	2	2	16	1	9	14	0	A	1	A	-
La-9	FTR	5/45	46	696	14	2	-	6	7	1	5	5	20	1	9	16	0	A	1	A	-

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
LaGG-3	FTR	4/41	46	384	13	2	-	7	4	1	2	1	10	1	7	8	0	A	1	A	-
MG-1	FTR	11/40	46	432	14	2	-	8	4	1	2	1	10	1	8	10	0	A	1	A	-
MG-3	FTR	10/41	46	456	14	2	-	8	4	1	2	1	10	1	8	12	0	A	1	A	-
Yak-1	FTR	1/42	46	456	13	2	-	7	4	1	2	2	10	1	8	12	0	A	1	A	-
Yak-7	FTR	6/42	46	480	13	2	-	8	5	1	2	2	11	1	8	13	0	A	1	A	-
Yak-9	FTR	8/42	46	528	13	2	-	7	6	1	2	2	13	1	8	14	0	A	1	A	-
Cavalry	INF	1/38	46	132	5	3	0	6	1	1	5	2	0	1	6	6	0	S	6	L	NT
Engineer	INF	9/39	46	216	3	2	0	6	1	1	7	6	1	0	7	8	0	S	8	L	AM
Conscript	INF	1/38	46	96	2	2	0	5	0	1	5	1	0	1	6	6	0	S	6	L	AM
Bridge Engineer	INF	1/38	46	168	3	2	0	6	1	1	5	5	1	1	7	7	0	S	8	L	AM
Guards Cavalry	INF	9/42	46	180	5	3	0	6	1	1	7	5	0	0	6	7	0	S	8	L	NT
Guards	INF	9/42	46	180	3	2	0	7	1	1	8	6	0	0	7	7	0	S	8	L	AM
Naval Brigade	INF	9/39	46	108	3	2	0	5	1	1	4	1	0	0	5	5	0	S	8	L	AM
Paratrooper	INF	9/39	46	168	3	2	0	7	1	1	7	2	1	1	6	8	0	S	8	L	AB
Regular	INF	1/38	46	120	3	2	0	6	1	1	5	2	0	1	7	7	0	S	8	L	AM
Naval Transport	NTP	1/40	46	168	5	1	-	0	1	1	0	0	0	0	4	8	0	N	2	N	-
BA-10	RCN	1/32	46	156	7	4	55	7	5	1	1	7	1	1	6	6	1	H	6	AT	NT
BA-64	RCN	1/43	46	144	8	4	85	10	2	1	2	1	1	1	7	6	1	H	6	AT	NT
IL-10	TB	1/45	46	744	12	2	-	5	5	1	8	10	16	2	16	15	0	A	1	A	-
IL-2	TB	7/41	46	540	12	2	-	4	3	1	6	8	8	2	14	10	0	A	1	A	-
IL-2M3	TB	3/42	46	612	12	2	-	5	4	1	9	10	8	2	15	12	0	A	1	A	-
P-39D	TB	6/41	46	540	12	2	-	7	4	1	6	8	13	1	12	7	0	A	1	A	-
BT-5	TK	4/34	46	132	8	2	55	11	6	1	4	6	0	1	6	6	1	H	4	T	NT
BT-7	TK	6/35	46	156	8	2	75	10	6	1	5	6	0	1	9	8	1	H	4	T	NT
IS-2	TK	4/44	46	492	5	2	49	4	10	2	16	21	0	3	18	14	2	H	4	T	NT
IS-3	TK	4/45	46	564	5	2	49	4	10	2	17	21	1	3	20	14	2	H	4	T	NT
KV-1/29	TK	9/39	46	348	5	2	38	13	7	1	12	10	0	1	14	14	2	H	3	T	NT
KV-1/41	TK	7/41	46	348	5	2	45	13	8	1	12	11	0	1	15	13	2	H	3	T	NT
KV-1/42	TK	6/42	46	384	4	2	45	13	8	1	12	11	0	1	17	14	2	H	3	T	NT

EQUIP. TYPE	CLASS	DATE AV.	YEAR EX.	COST	MO	SP	FU	AM	IN	RA	SA	HA	AA	NA	GD	AD	CD	TT	RM	MM	TR
KV-2	TK	10/40	46	420	3	2	33	3	5	1	19	13	0	1	14	14	2	H	2	T	NT
KV-85	TK	10/43	46	396	5	2	50	9	9	2	14	15	0	1	14	12	2	H	3	T	NT
T-26S	TK	1/33	46	156	4	2	45	14	6	1	4	7	0	1	8	6	3	H	3	T	NT
T-34/40	TK	1/41	46	276	6	2	55	9	7	1	12	10	0	1	13	9	2	H	4	T	NT
T-34/41	TK	10/41	46	288	6	2	55	9	8	1	12	11	0	1	14	9	2	H	4	T	NT
T-34/43	TK	10/42	46	360	6	2	54	10	8	1	12	11	0	1	15	10	2	H	4	T	NT
T-34/85	TK	4/44	46	336	6	2	55	8	9	2	14	15	0	1	15	10	2	H	4	T	NT
T-43	TK	4/42	46	300	5	2	55	10	8	1	12	11	0	1	16	11	3	H	4	T	NT
T-60	TK	8/41	46	192	5	3	87	25	6	1	3	3	0	1	12	8	1	H	5	T	NT
T-70	TK	10/41	46	180	6	3	70	8	6	1	4	6	0	1	10	7	2	H	5	T	NT
Truck	TPT	9/38	46	48	8	1	60	4	0	1	0	0	0	0	2	0	0	S	1	W	NT
Wagon	TPT	9/36	46	24	4	1	0	0	0	1	0	0	0	0	1	0	0	S	1	W	NT

CREDITS

Producer	Scott Evans
Associate Producer	Rick Martinez
Game Design	SSI Special Projects Group
Lead Programmer	Russ Brown
Additional Programming	Paul Murray
Audio Programming	Ralph Thomas
Lead Artist	Dave Jensen
Artists	Grisha Grigoriev, Ron Kee, Gennady Krakovsky, David Ryan Paul, Ken J. Shibata, Stephen Tang
Additional Art	Michael Rugg
Manager of Visual Arts	Steve Burke
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Scripting	Mike Bennighof, Brian Knipple
Game Manual	Anathea Lopez
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Audio Engineers	Stephen Lam, Lance Page
Media Engineers	Lee Crawford, Maurice Jackson
Soundtrack	Kevin Manthei
Additional "Swing"	
Soundtrack	Steven Wethy
Great Highland Bagpipe & Scottish Small-Pipes	Eric Rigler
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Models Supplied By	GHQ
Graphic Design and DTP	LOUIS SAEKOW DESIGN: Dave Boudreau & Leedara Zola
Special Thanks	Michael Bench, Bret Berry, Richard Burnett, J.M. Byrd, Chris Carr, Glen Cureton, Jean Davison, Allan Ernat, Annette Grove, Chuck Kroegel, Whitney Laucher, Debbie Minardi, Miki Morris, Louis Peña, Frank Rios, The Rumba Bums, Laura Root, John "Crawdaddy" Ross, Greg Scott, Sandy Shepard, The Unknown Modeler, Richard Wagenet.

QUESTIONS OR PROBLEMS?

If you encounter disk or system related problems you can reach us through several methods: Telephone: (423) 670-2020 between 9:00A.M. and 9:00P.M., Eastern Standard Time, Monday through Friday, holidays excluded. Tech Support Fax: (423) 670-2021 Attn: Technical Support, Calling our automated services at: (423) 670-2022. Filling out our online support form at: http://store.learningco.com/dev/support_form.asp (or the game's web page, which is listed in the manual), Email: support@learningco.com (please list the game's name as the message's subject), You can also write to us at: The Learning Company, ATTN: Technical Support 9715 Parkside Drive, Knoxville, TN 37922 (include a self-addressed, stamped envelope for reply).

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